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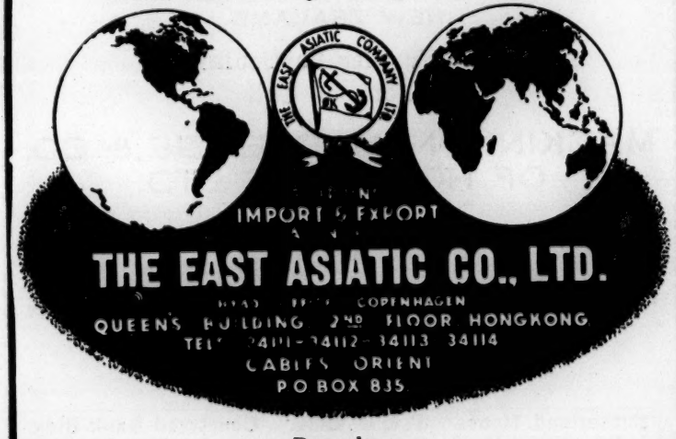

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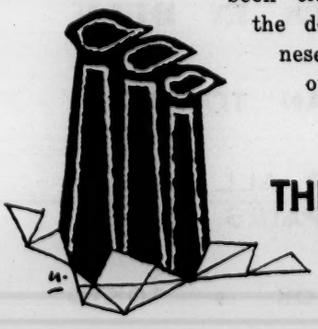

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ECONOMIC REVIEW

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CHINA'S POPULATION PROBLEM

There appears to be a conscious conspiracy of silence among the leading members of the Peking Government about the effect of the increase in population during the last quarter-century on the true economic situation. It is marked in relation to comparisons of output and to the current serious shortages of essential foodstuffs. Behind this question, of course, lie immense issues of high policy involving not only the major direction of home policy but also the most basic problems of foreign policy. Outer Mongolia and its vast, and empty steppes, for example, are a basic factor in the problem. This, in turn, would vitally affect relations between China and the Soviet Union.

The most profound criticism of the Attlee-Bevan group of British Labour leaders, in their findings on China, was the ignoring of the pressure of population on the land and resources in relation to the hopes of raising the standard of living. Dr. Sun Yat-sen called not only for the modernization and industrialization of China but for vast railway schemes linked up with immigration on an enormous scale to Mongolia. The problems alike of distance and of fecundity were thus taken into common cognisance and their solution suggested in a grandiose way.

The criticisms of the Communist "blind eye" would have been even sharper had the visitors been able to read the text of Vice-Premier Chen Yun's long address to the National Congress. If Liu Shao-chi is the Archpriest of the Marxist faith and the principal theoretician of the regime, Chen Yun is the chief economic architect of the new State. His background was little known when he suddenly blossomed forth as the virtual economic dictator of China in the first spectacular socialisation measures in February, 1950. In the organization and enforcement of economic policy he is all-powerful. In his address to the Congress he made an elaborate explanation of the shortages of grain, vegetable oils, meat and cloth, and in doing so admitted that people were saying that "conditions were never as bad as now under the old regime." In the five years before the Sino-Japanese war—which broke out in 1937—grain output averaged 280,000 million catties, he said, with 300,000 m. in 1936. In 1953 it was 330,000 million, and cotton output was far greater. Export did not exceed the pre-war ratio, and the shortages could not, therefore, be attributed to export.

Nobody will suppose that so able and outstanding a man as Chen Yun omitted any consideration of the increase in population by sheer oversight. It must have gone up by at least 100 million in the last quarter-century, and probably more. Even the most sanguine Chinese pronouncements on output seldom claimed to have exceeded the pre-war peak. Yet since 1930 there has been a great rise in population. The only reference made to the observations by Mr. Attlee and Mr. Bevan and other friendly critics on this point came from an official in the Census Department of the Central Government. He also played up the theme of the 600 million as "China's precious capital." He says the rate of increase did not exceed one per cent before 1937, but had registered a "marked rise in the few years since liberation because of the sharp decline in the death rate."

Now it is two per cent, and it probably rose nearer that figure than one per cent as soon as the Japanese came in with their rigid insistence on wholesale inoculations in all the areas under their control. Until the 1953 Census all figures were mere guesswork, including the birth and mortality rates, so the Census official is talking without the book, in his pre-Census estimates. Moreover, half-a-century ago medical missions and hospitals began to dot the entire countryside, contributing immensely to health long before the "liberation." Now there are vast areas without Western-trained doctors. Indeed the position is so acute that even in this age of synthetic marvels the People's Government is turning back on itself and trying to rehabilitate "native medicine" throughout the country, though it is no better now than it was through the ages when it assisted nature to keep the balance.

A justifiable assumption is that the rise of two per cent in the population began long before the liberation. But while this, at 10 or 12 million a year, must have added many millions of mouths—and hands—to the population, the problem is not one of immediate derangement of supplies as of future prospects. In two short decades the 600 million of today should have risen to 800 millions. There has been a great hegira to the cities and to the mines and industries, but none of the 62 million in Szechuan can very well go either to Shanghai or to Anshan. Nor even when the 141 projects are completed will it make all that difference to the issue of absorption of man power. If China became as heavily industrialized as the United States it still would not solve the problem. And industrialization mainly for strategic reasons in a single strategic zone like the North-east merely drains away the wealth and resources of China Proper without providing for a corresponding number of people and jobs. Manifestly there must be an intensive industrialization also inside the Wall, and a totally new concept of capital needs.

If Stalin badly wanted a huge loan from the United States after the war, (and then behaved in a way to make such an offer impossible), China needs help on an even greater though more extended scale. No doubt the rigours of policy will persuade Peking that no such turn is possible until the Soviet Russians have duly put up the 140 factories. Then it may become practical and urgent policy. But even so it will not be enough. If there is room in the North-east for another 30 or 40 millions on top of the 40 millions who have moved there from Hopei and Shantung, or have been created by natural increase during the past half-century, there is room in the vast steppes of Outer Mongolia, which exceeds the total area of China Proper, for 100 million. And it will be needed by the way things are going now.

In one of his articles on his trip to China, Mr. Aneurin Bevan stressed the vague and evasive answers they received to their queries as to how the rulers in Peking propose to feed the huge increase in population and at the same time provide the food surplus needed to carry out their industrial projects.

> Where I felt incredulous," he said, was in the claims made to improve the productivity of the land already under cultivation. It is hard to believe that much more can be got from the soil than the Chinese peasant is already getting....It is impossible to escape the conclusion that in this question of population versus food supply the Chinese Communists are evasive. The Chinese Communists appear to be afraid that if they advocate family planning it will smack of 'social defeatism.' The Chinese leaders may find that their unwillingness to resolve this conflict will face them with their most serious problem."

The issue cannot be evaded—it must be faced. And it can only be overcome by boldness in conception and in policy, such as Dr. Sun Yat-sen certainly brought to his projects in "The International Development of China." There must be economic industrialization inside the wall at least to correspond with the strategic industrialization outside the wall, and the necessary reversals of policy should be instituted accordingly in China Proper at least. The co-operation of the United Nations and the World Bank, or Western Governments and Japan, must be sought—and once sought should be willingly and generously accorded. An enormous scheme of organised migration into the vast spaces of Northern Manchuria, Mongolia and Sinkiang must be devised with new railways and other forms of transport to correspond. The Kirghiz and Kazakhs herdsmen have had to put up with hordes of urban but adventurous youngsters from the great cities of the Soviet Union, who were sent there to open up great areas of uncultivated land. The Outer Mongols, later perhaps rather than sooner, will likewise have to face up to the invasion of vast numbers of farmers from China. This, rather than birth control, is the only possible solution for the next half-century.

THE IMPORTANCE OF UNIFIED PLANNING

One of the troubles about Communist all-over and all-out planning is that if one little cog in the wheel goes wrong all goes wrong. And the more meticulous and elaborate the planning, the more assuredly does something go wrong. Peking is evidently making haste with exasperating slowness in planning the new or expanded cities and facilities for the 141 heavy industrial projects which the Soviet Union is building for them. A good deal of face is being lost and tempers frayed as a result. The Peking People's Daily recently entered into an elaborate series of apologetics and of alibis to explain what all the feverish work being done in this connection is still in the preparatory stage. An industrial area, it says, is made up of many factories and mines. They are not pieced together independently of each other. Many things call for unified planning and arrangements as well as close co-ordination of all quarters.

For the benefit of the many uninitiated, it goes into elementary detail. For instance, it says, the series of questions of where to procure the fresh water daily required for this or that industrial area, where to discharge the dirty water, how to supply electricity, heat and gas, how to lay out the intricate underground water, sewerage, steam and gas pipings, and electric cables, how to set up telegraph, telephone, and broadcast network, where to build railways, highways, wharves, and railway stations, how to arrange the locations of living quarters, hospitals, schools, co-operatives, public security sub-offices and other public utility work, etc., all calls for thorough and meticulous planning.

Moreover, the designing and start of each project must be timed in such a way that one closely follows the other. "Any lack of co-ordination, poor timing or failure to calculate the economic results thoroughly, will result either in delaying the building of the industrial area as a whole, causing difficulties to construction and production, or in tremendous waste, reducing the industrial area permanently to an irrational status."

An urban construction committee has therefore been set up in each city concerned to strengthen organizational leadership over this work. China has never before undertaken planned industrial construction. To build many new industrial areas from scratch at one stroke, and transform many old and backward consumption cities into new Socialist industrial cities is not without difficulties. To begin with, there is a great shortage both of construction experience and of technical cadres. Moreover, the fact that work on every aspect starts together and goes on together during the period of planned construction, makes time very pressing and adds considerably to the difficulties. At the start of construction this was very soon found out, because the complicated character of the extra-factory projects and the construction of new cities was not comprehended, the technical forces were slow in being formed and were poorly organised, and some units found so much in trying to co-ordinate their work that they reverted to what the Communists call "self-centralism."

Clearly there is quite a considerable mess in this most urgent and important test of all of Communist efficiency in China. But there is always a cure for chaos, even when it comes from excess rather than lack of organization. It is more and yet more organization—and, of course, more and more officials and more and more bumph. Peking has laid down the measures to relieve the confusion. Large technical forces may be transferred from various cities to the new industrial cities to press on with the work of industrial construction. The urban construction committee of each area should be responsible for strengthening unified leadership and organise the disorganised co-ordination. Then instead of falling down on the time and co-ordination schedules all concerned will be able to ensure the smooth progress of each keypoint project according to plan.

No plumber can lay a pipe or fix a tap unless he is ideologically equipped to do so in the Communist State, and this is also one of the urgent measures decreed by Peking. Not only must all the plumbers and bricklayers, the architects and engineers, the water and gas workers study up what Engels and Lenin said Marx intended to say, but they must also practise criticism and self-criticism "in order to ensure the timely fulfilment" of the important construction task. It is, of course, all wrong that these things are simply a waste of time that might otherwise be devoted to the laying of a few more bricks per man per day or the pouring of a little more concrete. The secular soul must have its self-expression. It is another job for the Party organizations in each city or department concerned.

Time is all-important, nevertheless, because if these enterprises start work one day early, more value in billions of yuan can be created and delay in building be avoided. So the battle to keep to time is all-important. But without ideology time may be gained but lost in efficiency. "If time is won without making economic and technical study, or by using inferior materials or less labour, the consequence will be either re-building, causing waste of more time, or permanent irrationality in the new industrial areas, causing irremediable losses." So time is more than money and team-work indispensable. Yet all units lack experience and are short of man power. The organizational leadership is also weak and it is as hard as ever to find who has fallen down on the job when things are in disarray.

Another problem vexing the minds of the Party leaders is the high ratio of accidents. Occasionally one of the inherited technicians from the Kuomintang regime may be pilloried and sentenced as a scapegoat. But the trouble is widespread and general. Accordingly the Ministry of Labour has promulgated a directive on the strengthening of education on safety techniques. The various industrial and mining enterprises are called on to intensify the education of their cadres and workmen, particularly the new workmen, in these techniques. Practical rules must be drawn up to ensure safety, and persons operating machines must first pass tests of competence. New methods and new equipment must likewise entail a new course of training and new tests.

OIL REFINING IN THE FAR EAST

By R. B. Cooper

The author dealt with the production of oil in the Far East in this Review, issue No. 6, of August 5, pp. 170/71. The present article is concerned with an equally important aspect of oil operations—that of refining—and in particular with the large new refinery now under construction at Kwinana, Western Australia.

Crude oil as it comes out of the ground is of little use as such. It first has to be refined into the varied products by which oil is known today—products like petrol, kerosene, fuel oil, lubricating oil, and many others. Oil refining is a complex and expensive operation. Vast refineries have to be built, costing many thousands, even millions, of pounds. The only alternative is for finished products to be shipped from overseas, but in the long run this is very uneconomic. The refining capacity of a country or an area has therefore come to be as economically important as oil production.

Before the Second World War, there were several important refineries established in Indonesia and other countries in the Far East but much of the plant was destroyed during the war. An intensive programme of reconstruction was started after 1945 and in fact by 1952 total refining capacity in the Far East had reached 18,000,000 tons a year, more than sufficient to process all crude oil produced locally. About half of this refining capacity is located in Indonesia, while smaller plants exist in Japan, Australia, Formosa, India, Pakistan and Burma. The two largest refineries in the Far East are in South Sumatra; at Pladju (4,250,000 tons a year), and Sunjei Gerong (3,250,000 tons a year).

Much interest has been focussed recently on the large new refineries planned or being built in the Far East by the world's major oil companies. It is estimated that when they are in full production in a few years' time, total refining capacity will have jumped to about 28,000,000 tons a year. Four of these refineries are under construction in Australia, while three are to be built in India. The biggest of the refineries under construction is at Kwinana, Western Australia where for 24 months an army of men and machines has been working on what was once a scrub-covered, sandy waste. The refinery is being built by the Anglo-Iranian Oil Company and will have a capacity of 3,000,000 tons a year, making it the third largest refinery in the Far East and the biggest in Australia. When Kwinana Refinery is completed and begins operating early next year, it will have cost £30,000,000 to build. Its products will serve markets in Australia and New Zealand.

The story of the building of Kwinana Refinery is a good example of the problems which have to be met and overcome in such a gigantic engineering project. Anglo-Iranian first became connected with the Commonwealth in 1920, at a time when Australia's oil requirements were very small. In that year the Company, in association with the Federal Government, formed a separate company called Commonwealth Oil Refineries Ltd. Ever since 1924, C.O.R. has operated a small refinery at Laverton, Melbourne, from where products have been distributed throughout the Commonwealth. After the Second World War, it became apparent that to meet the increasing demand for products in Australasian and Indian Ocean markets, a refinery would have to be built nearer the sources of oil production than Europe or the U.K. Laverton Refinery could not easily be expanded, and so Anglo-Iranian representatives began to look elsewhere in Australia for a refinery site.

In 1952, the Company selected as a site a stretch of beach near Fremantle, Western Australia. The name Kwinana was chosen from the name of a small wrecked vessel which for many years had been a landmark on that part of the coast. An agreement was signed between the Company and the Government of Western Australia, and work officially started on October 1st, 1952, when contractors began clearing the site ready for construction. The project, which may well lead to Kwinana becoming one of the most important industrial areas in Australia as additional industries are attracted to the district, consisted of three major elements: the refinery, with a capacity for processing 3,000,000 tons of crude oil a year; the nearby port, capable of receiving and despatching the world's largest oil tankers; and a complete township, with houses for the Company's employees, shops, and other amenities. The refinery units will be among the most modern in the world. Key items will be two atmospheric distillation units, where the crude oil is separated into motor spirit, kerosene, diesel and fuel oils. These products are then given further treatment before becoming ready for marketing. An essential requirement for the operation of the refinery is cooling water. About 2,500,000 gallons of water an hour will be pumped from the sea, circulated round the various plants, and returned to the sea.

It is estimated that 100,000 tons of materials and equipment will be required for the project, and already over 75,000 tons have arrived by sea at Fremantle and transported overland to Kwinana. While practically all of the material for the various refining plants was purchased in the U.K. and America, a larger proportion than was first expected of steel plate, piping and other equipment has been available in Australia. Orders worth more than £11,000,000 have been placed for materials. Of this sum, British and Australian orders each total about £4,500,000, and in addition sub-contracts with Australian firms for preparatory and building work on the site are worth about £1,400,000.

Today, there are over 3,000 men working on the 900 acre site of the refinery. The skyline is changing daily as the gleaming towers reach up to the sky. At the oil port being built in Cockburn Sound, over 5,000,000 cubic yards of sand have been dredged to make a four and a half mile long channel to the jetties. Another 2,000,000 cubic yards have yet to be dredged. These impressive figures give some idea of the magnitude of the Kwinana project—a project which, when completed, will be of far-reaching significance to the Far Eastern economy.

MALAYA'S ELECTRIFICATION

For the first time in the history of Malaya, many of the bigger towns are faced with a surplus of electricity, so much so that schemes for the hire purchase of electrical equipment (cookers, air-conditioning plants, refrigerators) have been introduced as an incentive to "buy more power". Whatever else the emergency has done for Malaya it has speeded-up cross-country electricity supplies to hitherto remote villages. Primarily, power was needed to provide giant arc-lights round the perimeter fences of new villages. Once these had been installed and Malaya's biggest power station was opened (at Connaught Bridge, 20 miles from Kuala Lumpur) it was a simple task to improve supplies so that villagers could have sufficient for domestic uses.

By the end of last year, the Central Electricity Board —a semi-government body—had laid on electricity to 127 new villages out of the 158 which the Malayan Government had requested them to provide with supplies on a priority basis. In ever-growing Kuala Lumpur, the Federal capital, with a population of 300,000, an average of 1,000 new consumers of electricity a month are linked in the suburbs and in the huge housing estates. But although central Malaya has today plenty of electricity it is fully realised that unless plans are pushed ahead for further new projects, in another five or six years' time the country is going to find itself short again. That is why plans are now prepared to develop hydro-electric resources in the central range of mountains which form the 'backbone" of the Malayan peninsula.

Had it not been for the emergency it is most likely that Malaya would today have its hydro-electric project ready, or at least nearing completion. For five years the project has had to be shelved because the proposed site was deemed to be dangerous owing to roaming bands of terrorists. Of late the situation has improved so that an early start can be made. With hydro-electric power in Malaya it could halve the basic industrial rate of electricity and considerably reduce domestic rates.

Cost of electricity in Malaya is high because power stations have to depend on imported oil which is expensive. Ninety percent of the generating costs goes in buying oil. The Cameron Highlands hydro-electric power scheme will be able to supply 250,000 kilowatts of power on a very economical basis which is more than double the capacity of the public supplies in the country now. The last thing the $89 million (Malayan) Central Electricity Board concern can be accused is that of being a "stick-in-the-mud" organisation. Any logical plan to improve supplies or assist consumers is adopted without delay. All CEB break-down gangs operating in sprawling Kuala Lumpur (35 square miles of township) have their vans fitted with radio-telephone apparatus so that they can be directed from one place to another without returning to headquarters for instructions. This apparatus (VHF—Very High Frequency) works on the same system as used by police cars; but Kuala Lumpur has the distinction of being the first Far Eastern city to adopt it for its electricity department. Likewise all power stations and out-station switching points are also linked by radio-telephones.

There are still many villages in Malaya, especially on the east coast of Trengganu and Kelantan, without electricity and with little prospect of getting it for a number of years. But in a country where four-fifths of the land is jungle-covered this is hardly surprising. A number of these villages are only accessible by river; but electricity will come to them eventually. Great strides in providing public utilities for many have been made in the last few years and are still being made. For a country which has been fighting a shooting-war for the last six years, Malaya's record of social improvements is impressive. Today in Malaya's countryside, hurricane lamps and paraffin stoves are on their way out, displaced by electricity; and in towns, night is being turned into day.

MALAYA'S EDUCATION PROBLEM

One person in every eight in the Federation of Malaya is going to school or is a student. There are 800,000 students out of a population of nearly seven million, high for a South East Asian country. But there are 800,000 children who are not going to school. It is the Federation's knottiest problem for since the war the education authorities have never quite been able to catch up with this surge of enthusiasm for knowledge. Fathers who were emigrant mine labourers or rubber tappers, today want their sons to be educated. Mothers who cannot read or write will cut their household budgets to the bone to send children to school. In scores of villages in Malaya, Chinese girl rubber tappers return from work at noon, and two hours later, washed and neatly dressed, go to the village schools for lessons in reading and writing. Schools, especially the towns, are usually occupied from soon after dawn until late in the evening. After the normal morning school a new set of teachers and pupils comes in for the afternoon school, a measure designed to meet the education crisis in a country where the afternoon is normally considered too hot for schooling. Now there is talk of holding classes in the evening for students who cannot remain in the ordinary schools because they are over-age or are below a very high standard set in intermediate examinations. So difficult is accommodation, that schools today can only make room for the best brains amongst the students. Education is the No. 1 issue for many in the Federation, with yearly hundreds of children turned away because of lack of accommodation and others dismissed from the schools in the weeding out process of examinations, though the education authorities readily agree that the failures in these examinations are not necessarily dull children. To help the students who are squeezed out of the normal education system, there has recently been an expansion in technical training facilities so that boys who leave schools before getting their school certificates have an opening in the engineering industries. The Government has a plan: the free primary education as the right of every child between the ages of 6 and 12. This will be an obligation for it is intended to make primary education compulsory. The children will be taught in schools modelled on a new basis. In these National Schools, which will be constructed in every district, they will learn to read and write in the two official languages of the country, Malay and English, while they will also be able to learn Kuo Yu or Tamil if their parents wish it. To finance the new school scheme, a special tax has already been levied on every business of size, graded from a few dollars a year on the stallkeeper, to several thousands for the large companies. A new teachers' training college for 300 has been built in Malaya and two more are planned. The flow of trained teachers, qualified to give an education with a Malayan background, has swelled. Every month millions of dollars are poured into education. The country has never known such a demand for learning. Malaya's knottiest problem is being unravelled.

THE CHINESE EASTERN RAILWAY

By D. J. Roads

The eyes of the world have become focused on the Far East; because of the war in Korea, attention has turned to Red China. Once the most powerful in Asia, then weakened after being on the verge of partition by foreign nations, this nation is now again surging with a combination of military and industrial power ever known to the Far East. With the assistance of the Soviet Union, China has been able to match the highly technical and mechanized forces of the Allies on the Korean battlefield with a basically agricultural society.

China's meager railway system which consisted of less than 15,000 kilometers over only one-eighth of the national territory in 1931, has always been a drawback to her national defense. Most of these railways were located in the North and North eastern provinces. The railways in Manchuria, from their inception, have had a far greater effect on the political, economic and military events in China than has been the case in any other country or province in the world. From the early days of the Chinese dynasties that ruled Manchuria up to the present day, political crises have occurred which have been caused by, or closely connected with, railways.

China's history shows clearly that many officials were resistent to modern improvements in transportation, especially railways. This caused a "displacement" among the population and this would help prevent the recruitment of an army and seriously threaten the source of power. This state of mind of the early Chinese has directly affected the railway progress in China and Manchuria and helped to bring foreign nations to China to exploit her lands.

With the coming of the Chinese Eastern railway through Manchuria, we see something more menacing to the Imperial officials than modern transportation. The foreign penetration through the very heartland of the richest province of the Far East with a railway. This line has been called the "life line" of the Chinese Communists. It has also helped them in their intervention in Korea. Only time will tell if the railway will be used against them.

I

Long before the Sino-Japanese War (1894-1895), Russia had cherished the idea of the construction of a railroad from the Urals to the Pacific Coast, with the object of strengthening her strategical position and political influence in the Far East.

"Railways are products of economic and political forces alien to the whole structure of China. They marked a penetration of Western trade and actual investment which brought about economic intervention and indirect, and sometimes direct, political interference. This was important in Manchuria, which had a much greater railway mileage in proportion to territory than the rest of China." (1)

In 1896 when China sent her great statesman, Marquis Li Hung-chang as a special envoy to the coronation of Tsar Nicholas II, the Tsarist government induced him to sign a

secret treaty as compensation for the part played by Russia in forcing Japan to retrocede the Liaotung Peninsula to China.

"By the peace treaty of Shimonoseki in April, 1895, China ceded to Japan the southern tip of Manchuria, the Liaotung peninsula. At once Russia, Germany and France, at the initiative of the Tsarist government, intervened and advised Japan to 'give back' the territory within 15 days . . . China, and especially Li Hung-chang, gloated over the Japanese disgrace, little suspecting that Russia's real scheme was to add the whole of Manchuria to its own map." (2)

The stipulations of this treaty provided that every aggressive move of Japan against Russia or China would cause the two powers to support each other with all of their land and sea power. In order to transport Russian troops to danger points, Russia would have to extend the Trans-Siberian railway from Darumskaya, just over the Manchurian border in Siberia, almost in a straight line across Manchuria to Vladivostok. This line was later known as the Chinese Eastern railway.

"The first railway agreement was signed in pursuance of a treaty of alliance between China and Russia, dated June 3, 1896. This, the famous Li-Lobanoff alliance provided, in addition to establishing a defensive alliance against Japan, that China would agree to the construction of a short-cut for the Trans-Siberian system across northern Manchuria 'to facilitate the access of the Russian land troops to the menaced points'. (3)

To exploit the railroad concession, Russia charted the Russo-Chinese bank with a capital of Gold Rubles 11,250,000 Chinese taels advanced on permanent deposit by the Chinese government. The Russo-Chinese bank then entered into an agreement with the Chinese government to the following: (1) Shareholders of the proposed company to be Russian and Chinese only, (2) The gauge to be the Russian gauge of five feet, (3) Work to be begun within 12 months after signing and to be completed within six years, and (4) On the expiration of 80 years from the completion of the line, the railway and all railway property passes into the hands of the Chinese government without charge, and the Chinese government has the right, after 36 years, to buy the line at actual cost. This agreement, entered into by the bank and China, shows very clearly that the bank, though composed of Chinese, was really the Russian government.

"The Russo-Chinese bank and the Chinese Eastern Railway Company were, actually, Russian government institutions, and in Manchuria served as but partially disguised arms of the Russian Ministry of Finance and the Ministry of Foreign Affairs. Although the Chinese government was given a semblance of financial participation in the railway by agreeing to pay the sum of 5,000,000 taels to the Russo-Chinese bank, these were but devices to conceal the preponderance of Russian official control of the railway. It appears that at the time of the organization of the bank, the Russian government paid 5,000,000 gold rubles toward its share capitalization, and in return for this the bank issued to the Russian State bank a receipt to the effect that the equivalent in shares was received. No share certificates were issued and by this transaction the Russian government actually received control of the bank itself." (4)

Another source of revenue to the Russo-Chinese bank was foreign capital. The Russian government borrowed money in French markets to enable her to finance the bank and the railway. The loans were loans to the Russian government, not to the Russo-Chinese bank. The French bankers did not receive shares in the bank or the railway as collateral but received Russian government bonds. The French, therefore, did not have a claim on the bank or the railway but only a claim on the Russian government.

"As the Imperial Treasury was not in a position to meet these liabilities out of its resources, it had to borrow heavily abroad for this purpose. These foreign loans were not issued specifically for the Chinese Eastern railway, so the Imperial Treasury remained the sole legal creditor of the railway, even if it were not so in justice to the French bond-holders, for example, who believed they were acquiring rights in the railway by buying the bonds." (5)

In the spring of 1897 work began and Harbin was founded and made the headquarters for the construction of the line. This was the first step toward what has been called, "Russia's Pacific conquest of China." Work was progressing very rapidly.

"The energy with which the work of the railroad development is being pushed forward by the Russians in Manchuria is impressed on the visitor to Vladivostok from the moment he lands. The country for miles swarms with parties of labourers engaged in the construction of earthworks, the erection of bridges and the general work necessary to the construction of a railway. The labourers are convicts who have been sent to Siberia for various offenses." (6)

Then in 1898, when Russia forced China to lease to her the Liaotung Peninsula, she also secured the right to construct a railroad northward from Port Arthur and Dairen to the Chinese Eastern railway at Harbin.

"The significance of this treaty in the history of Far Eastern policy cannot be exaggerated. The same Liaotung Peninsula, with its ports, had been ceded by China to Japan three years earlier as the result of the war in which China was the loser. Then came Russia, appearing as the protector of weak China, and forced Japan to withdraw. As a result, Russia then seemed the strongest advocate of China's territorial integrity. Now, Russia herself followed in Japan's footsteps and took possession of what she had denied Japan." (7)

With this new addition Russia sent swarms of officials, technicians, and labourers who settled along the railway zone, (10 miles on both sides of the right-of-way) to an extent that it was virtually a Russian colony.

"From March, 1899, Russia had the right to invade the whole country with a system of railways designed with one object—that of growing districts in the world; and that right was only obtained because the Chinese government was convinced that to offer resistance to the Russians was worse than useless." (8)

"In northern Manchuria along the line of the Chinese Eastern railway are a number of important factories including flour mills, bean mills, breweries, beet sugar mills and lumbermiils." (9)

The line was completed in 1901. Its total length was 1,600 miles saving the distance of 560 miles to Vladivostok from China. It cut its way through some vitally needed territory that belong to China.

"In the wake of the railway came settlers, towns, churches, schools, hospitals and the amenities of civilized life, where nothing had previously existed. Russia planned and administered all this new life in the railway zone with its Russian judiciary, Russian militia and Russian municipal administration. The documents of the time leave no doubt as to the real intentions of the Tsarist government in colonizing north Manchuria. Between 1898 and 1904, it seemed only a question of time when Russia would annex the country. Then the Russo-Japanese War came and the question of annexation receded into the dim distance". (10)

II

The Chinese Eastern railway was one of the primary causes of the Russo-Japanese War (1904-1905). Russia created a suspicion among Japan and the other great powers by the abusive use of the Chinese Eastern railway for the colonization and exploitation of China.

"Completion of the Chinese Eastern railway to Vladivostok and Port Arthur in Manchuria produced the Russo-Japanese War of 1904-1905. Free access to the sea is an

indispensable requisite for modern nations, so that the quest for an ice-free port was an inevitable part of Russia's foreign policy." (11)

In 1900 the Boxer Rebellion broke out in China and Russia, taking advantage of China's weakened position, occupied the greater part of Manchuria. This move by Russia caused great speculation on the part of the Japanese statesmen. They began to wonder if Japan would ever be in a position again to gain a foothold on the Asiatic coast.

"Large forces were moved into the areas of disturbance and order was restored in a drastic manner. Repression took form of a massacre of Chinese, many of whom probably had not participated in the uprising. Russian forces were soon in control of all of Manchuria." (12)

The Boxer disturbance soon ended, but the Russian troops continued to remain. This caused a widespread distrust on the part of China with envy and alarm on the part of Japan. Early in November large groups of naval reinforcements were dispatched to the Far East and Russia had now the important port of Newchwang and Japan started out to seek support to stop the Russian "Bear". Japan found such support in Great Britain who was fearful of a Russian advance toward India and who now saw a way to divert this force to the Far East. And so in 1902, the Anglo-Japanese treaty was signed in London to try and stop the Russian annexation of Manchuria.

"So far as the Manchurian question was concerned, it meant that if war broke out between Japan and Russia, Great Britain would restrain Russia's associates from entering the struggle." (13)

"It was the Anglo-Japanese alliance which gave Japan support necessary for a challenge to Russia. In the Far East there were Englishmen who felt that Britain should work with Japan, now that China had proven powerless to resist the Russian advance. Russia sought her own ends in Manchuria." (14)

By late 1903, the situation was thoroughly complicated and on February 10th, 1904, Japan declared war on Russia. Russia was defeated and Japan now held the upperhand. The treaty which brought the costly war to an end was the Treaty of Portsmouth (1905) where Japan, subject to China's consent, should take over the southern branch of the Chinese Eastern railway up to Chang-chun (halfway between Mukden and Harbin) together with all of the rights connected therewith.

"The Treaty of Portsmouth was signed on September 5, 1905. Russia undertook to evacuate Manchuria and to place it again under the sovereignty of China. The much disputed Liaotung Peninsula, containing the two ports of Talienwan and Port Arthur, was turned over as a 'leased territory' to Japan, contingent on the Chinese consent—which could not refuse. Railroads in the southern part of Manchuria, constructed by Russia, were ceded to Japan without payment." (15)

Japan's star rose high during this war. Many could not believe that the small nation, almost unknown, would be able to beat Russia. Now she shared with Russia the reputation of being able to upset the balance of power in the Far East. It was, of course, very natural for China to take alarm because Manchuria might pass under the control of Japan and Russia. Both of these nations now controlled Manchuria. Russia controlled the north along the Chinese Eastern railway while Japan was in the south controlling the branch of the Chinese Eastern railway now called the South Manchurian railroad.

Suffice it to say that from 1905 to 1917, Russia and Japan exerted every effort, by use of their railways, to consolidate and colonialize their positions in Manchuria.

Also in the same year, 1905, the American magnate, E. H. Harriman, entered into negotiations with the Japanese for joint control of the South Manchuria railway, and in 1909, he made tentative offers for the purchase of the Russian interest in the Chinese Eastern railway. But both projects came to naught.

"The Russian Empire and Japan were each fighting for the privilege to partition China in order to gain control of trade through railway concessions. In the Far East, the Tsar converted Vladivostok into a Gibraltar of the Pacific. Under the terms of the peace, they continued to hold the Chinese Eastern railway with Russian bayonets. In this period until the Russian revolution of 1917 the Tsar and the Mikado jointly shared in the despoliation of Manchuria."(16)

"Within their respective spheres of interest each state was to be assured of entire freedom of exploitation in such matters as railway financing and telegraph construction." (17)

In World War I, Russia's attentions were directed to Europe, so much that the country could not pay as much attention as was necessary to keep the railway in good running condition. Russia also found it necessary to sell part of this important line to the Japanese in 1916.

"In the World War, Russia's attentions were turned to Europe, so much so that in 1916 the Tsarist government consented to sell a small section of the Chinese Eastern railway's southern branch to Japan. The next year the Bolshevik Revolution came, and while the railway remained in the hands of the Russian administration, strongly anti-Soviet in character, it was helpless without subsidies which the Tsarist Treasury had been granting". (18)

Following the fall of the Tsarist government in 1918 the Allied Powers began their expedition into Siberia and an Inter-Allied Technical board was established at Harbin to supervise the technical and economic operation of the Chinese Eastern railway.

"In the same year (1918) China accepted the American proposal to put the Chinese Eastern railroad under the control of John W. Stevens, as a trustee for the Russian government. The Americans ran the line until 1920 at a cost of five million dollars which was never repaid. This was the Four-Power Consortium that was to allow the United States to share in the exploitation of Manchuria." (19)

In 1919 the Soviet government offered to relinquish the railway to China but it soon abandoned this position and in 1924 an agreement was signed on behalf of the Russo-Asiatic bank under five directors of the Chinese government and five directors under the Soviet government as managers. Even at an earlier time we see that the Soviets were afraid that other powers would gain control of the railway line.

"A secret treaty was signed July 3rd, 1916, and was to assure cooperation between Russia and Japan in case any third power attempted to dominate China. If, as we alleged, this secret treaty was aimed at the United States, the negotiators and their governments were sadly lacking in imagination, for the prospect of the United States declaring war on either Russia or Japan in order to secure political domination of China, was too remote to be considered by practical diplomats." (20)

Also we see that the American, John W. Stevens, was not doing what he should have in taking charge of the line. But it was not his fault. He was only taking orders from his government.

"While Mr. Stevens drafted an agreement to carry out this proposal, the American engineers remained in enforced idleness at Harbin and Vladivostok, tedious and prolonged negotiations proceeded between Washington and Tokyo. The Allied governments and the Czecho-Slovak National Council readily assented to the American proposal, but Japan made objections and counter-objections. Here again the obscure machinations of the Japanese military group constituted an obstacle to co-operation." (21)

Even though Russia and Japan had signed this secret treaty it did not improve their relations with one another as each nation was just waiting for the other to make a move so that the exploitation of Manchuria could go on at China's expense. Many incidents took place and the relations be-

tween Russia and Japan were becoming more and more strained with China at the other end of the triangle pouring oil on a smouldering fire.

During the Washington Conference for Disarmament (1922), the Chinese Eastern railway received considerable attention and it was finally agreed that the line should have better protection and more efficient service to prevent the waste of property.

"The Ninth (proposal) called for the better management of the Chinese Eastern railway. The Tenth reserved the right of the powers to insist upon the responsibility of China for the performance or non-performance of the obligations toward the stock-holders, bond-holders, and creditors of this railway." (22)

Thus the sovereignty of China was given a half-hearted recognition and can hardly be interpreted otherwise than as a convenient means of side-stepping the problem that the Conference could not handle. Japan agreed to evacuate her troops from Siberia to facilitate relations with China and Japan.

One of the first major disputes over the Chinese Eastern railway's operations came in 1926 when a controversy arose with China over the question of the transportation of troops. This led to arrests and many raids but finally came out alright. Chang Tso-lin started replacing the Russian railway guards with his own soldiers and Ivonov, the Soviet general manager of the line, was arrested and put in prison. (Chang Tso-lin was the self ordained warlord in Manchuria at this time). Full significance can be realized here on how the Russians treated the Chinese. Then the tables were turned and the Chinese began to treat the Russians in the same manner.

"As early as 1920, when the Chinese had just began to assert their rights against the Soviets, many Russians organized a patriotic society for the self-defense against Chinese oppression. In a pamphlet published in Russia that year, this society enumerated 600 cases in which the Chinese railway guards attacked Russian railway officials or subjected Russian residents, including women and children, to extortion, brutality and persecution. Before the revolution of 1917, it was the Muscovites who lorded it over the Manchu. Now the roles are reversed." (23)

During the following years relations between Russia and China were at a low ebb. China's internal problem was entangled in politics. The left wing of the Kuomintang party was under strong Soviet influence in the person of Michael Borodin (who had been brought to China by Dr. Sun Yat-sen to advise the Nationalist government). The jealousies between the Russian mission (Borodin) and Chang Kai-shek came to a head which ended in the suppression of Communism and the expulsion of Borodin and his mission from China. Chiang then ordered the closing of all Soviet consulates and trade organizations but allowed the Chinese Eastern railway to carry on its business under Chinese supervision.

Conditions went from bad to worse on the Chinese Eastern railway and thus this situation prevailed in 1931 when Japan started her long march to conquer Manchuria, China, South-eastern Asia and try for the domination of the rest of the world.

III

On September 18, 1931, Japan was "insulted" when a few feet of the South Manchurian railway tracks were blown up. This was the signal for Japan to start her conquest of Asia. The Chinese and the Japanese had for years been wondering when the day would come; only the foreign offices of the great powers seemed to believe that the peace of the world was secure because they had written and signed treaties of peace and amity.

This new move of Japan's forces in Manchuria caused great uneasiness and distrust on the part of the Soviet Union. A succession of border clashes resulted which were usually due to the differences in opinion concerning the location of boundary lines. To support its forces at the borders, Japan, through the administration of the South Manchuria railway, constructed new lines of railway. These new lines greatly reduced the value of the Chinese Eastern railway and placed the Soviets in an untenable position of either selling the line or war.

"The Soviet Union was led to make its proposal by the Japanese control of north Manchuria and by the events consequent upon that control. Japanese supervision of all Manchuria placed the railway virtually within the system of the Japanese Empire. By building new lines parallel to or crossing the Chinese Eastern railway, the Japanese were able to reduce the revenues of the latter from 38,000,-000 gold rubles in 1929 to 18,000,000 in 1931. Bandit attacks upon trains and railway offices were seriously affecting traffic. Unless the Soviet government was prepared to assert itself by military intervention there was no alternative to ridding itself of the danger and financial loss by the sale of the road." (24)

The suggestion of M. Litvinov of Russia was then made to sell the line to Japan in 1933 as a way to help stop the friction with Japan on the Chinese Eastern railway. Because of the high price demanded by Russia (300,000,000 gold rubles, US$125,000,000) and the low price offered by Manchouko, actually Japan, (50,000,000 yen, US$10,-500,000) the negotiations were dragged until 1935.

"The Chinese Eastern railway had long been in the area of conflict between Moscow and Japan and notes from Japan disputed the Soviet ownership and the validity of any agreements. The matter became so serious that on May 2nd, Litvinov suggested the sale of the line 'as one means' of settling the conflicts which were complicating the relations of the Soviets both with Japan and Manchuria." (25)

In 1935 the Chinese Eastern railway was sold to Japan for 140,000,000 yen, and thus China was left out. One-sixth of the purchase price was to be paid in cash and one-sixth to be paid over a period of three years. The remaining two-thirds was to be paid in goods by Japan and Manchuria along with the pensions due the workers of the railway. Within three weeks most of the Soviet employees were back in the Soviet Union. This was the conclusion of long and stormy negotiations between the two countries.

"On March 23, 1935, the North Manchurian railway formerly the Chinese Eastern railway) was transferred to Manchouko with the signing of the historical agreement between Manchouko and the Soviet Union. The Manchouko government entrusted the management of the entire line and its affiliated enterprises to the South Manchurian railway company. This historic shift in management of the North Manchurian railway was effected without the least interruption of its traffic movement.

Miles acquired:	Hsinking-Harbin	141.1	miles
	Harbin-Manchouli	580.5	„
	Harbin-Suifenko	336.3	„
	Branch lines	4.3	„
		1,071.2	„ (26)

While the Japanese, especially in view of the exigencies of war, devoted their principal efforts to developing Manchuria as a supplier of minerals and metals to Japanese industries in the home islands, their occupation also witnessed a marked increase in the importance of Manchuria and the Chinese Eastern railway in the world affairs. The increase of manufacturing in Manchuria to carry on an aggressive war, caused the Chinese Eastern railway from carrying important raw materials to be converted into the

implements of war, to again play an important part in the world's great conflict, World War II.

With the sale of the Chinese Eastern railway, an important leaf in the history of the Far East was turned. Russia had first been forced out of Manchuria in 1918 but had returned in 1924. For the next two years the Chinese Eastern railway again represented the steel backbone of the Soviet sphere in Manchuria. In 1935 Russia was again expelled for a period of ten years. She returned to Harbin, under utterly different circumstances in August, 1945.

The summer of 1945 brought defeat to the Japanese Empire that had, during its few short years of domination, China, South-eastern Asia and the Pacific island groups. The great arsenal of industrial strength of the United States coupled with the great superiority of air and naval forces of the Allied Powers was too much for the Nippon Nation.

On February 11th, 1945 President Roosevelt, Mr Churchill and Marshal Stalin met at Yalta where the Soviet government had given a definite commitment to take up arms against Japan after the German surrender. In return it was agreed that the Russian rights and possessions lost to Japan by the Treaty of Portsmouth in 1905, should be restored. The agreement also included that the Chinese Eastern railway and the South Manchurian railway should be operated as a joint Sino-Soviet undertaking, likewise with safeguards for the pre-eminent interests of the U.S.S.R. in these railways. On the 9th of August, 1945 Russian troops began assailing Manchuria and by the 14th of August, 1945, Japan had surrendered. Now once again the Soviet Union was deeply entrenched in Manchuria.

"Moscow had two policies in store for Manchuria, one, the neutralization of Manchuria's military and economic potential, and second, an effective and lasting settlement of the Manchurian problem by means of establishing a 'friendly government' in Manchuria and, in one way or another, placing it under control of the Soviet Union." (27)

On the same day of the surrender of Japan, the Soviet Union signed an agreement with China regarding Manchuria. It consisted of the Port Arthur naval base area being used jointly by the Soviet Union and China for a period of thirty years, the actual defense to be entrusted to the Soviet Union. Civil administration was to be done by the Chinese with the approval of the Soviet Union. The Railway agreement was very much like the agreement in 1924 and 1929.

"The railway agreement provided for the uniting of the main trunk lines of the Chinese Eastern railway and the South Manchurian railway in a single system which was to be called the Chinese Ch'angch'un railway. This was designated the joint property of the U.S.S.R. and China and was to be jointly administered. All other lines were to be the full and exclusive property of the Chinese government. Management was to be entrusted to a Soviet director, with a Chinese deputy, so that in general the administrative positions resemble those in effect of the Chinese Eastern railway between 1924 and 1929". (28)

The Soviet Union now enjoys the same position in Manchuria held by the Tsarist government in 1898 to 1904. The Chinese National Government was powerless to stop the Soviets in Manchuria even to the extent of allowing the Soviets to refuse the Chinese the use of the Ch'angch'un railway in their civil war. The Soviets agreed to withdraw their forces from Manchuria but not until they had completely stripped the Manchurian industries and had left behind indications of their intent in Manchuria.

"Three elements within Manchuria continued to operate as instruments of Soviet policy, (1) colonies of Soviet Russians who had been established on the Ch'angch'un railway, (2) the sizable group of Chinese reimported from Russia, serving as a vital link between Soviet Russia and Chinese Communism and (3) thousands of Russian emigres in Manchuria and China that became Soviet Citizens, and a number promptly turned into informants and agents of the Soviet police." (29)

IV

The railway system suffered almost incalculable damages since the end of the war because of Russo-Japanese fighting, Russian occupation policies and the civil war itself.

"The railway's rolling stock was deteriorated and repair facilities had been looted or damaged. Chinese railway officials in Mukden were attempting unsuccessfully to obtain badly needed rolling stock from the other parts of Manchuria, which themselves were suffering from a severe shortage." (30)

The Chinese Communists continued their march southward. Behind the lines the Reds began setting up their administrative organs to get the province functioning again.

This was the state of affairs until February 14, 1950 when the Communist government signed with the Soviet Union the Agreement on the Chinese Changchun Railway, Port Arthur and Dairen.

"Foremost in this agreement was that the Soviet government was to transfer, gratis, to Red China all of its rights in the joint administration of the railway and all property belonging to the railway. The transfer was to take place immediately upon conclusion of the peace treaty with Japan or not later than "towards the end of 1952". (31)

Article two called for the withdrawing of Soviet troops from the naval base of Port Arthur and that all installations in the area to be handed over to the Government of the People's Republic of China but:

"The Government of the People's Republic of China will compensate the Soviet Union expenses incurred in the restoration and construction of the installations effected by the Soviet Union since 1945". (32)

What part the Chinese Eastern railway played in the Korean War is not hard to tell, even to the world outside the "Bamboo Curtain". It was only through the help of the "Big Brother", the Soviet Union, that the Chinese Communists were able to carry out their intervention in Korea.

Reports from travellers from the interior state that the line was taxed to its utmost carrying the supplies of war. We know that China was able to stock-pile huge quantities of materials which kept her army on the lines. The Great Debate, between General Douglas MacArthur and President Harry Truman, concerned itself with the bombing of supply routes and bases in Manchuria to stop the Reds.

Then on January 1, 1952, the Soviet press and Moscow Radio announced that Russia had fulfilled her agreement and had turned over the vital Chanchun railway in Manchuria to Communist China.

"The joint communique (Peiping Radio) issued today said the transfer including not only the actual railway lines but 'railway buildings, rolling stock, repair shops, power stations, telephone and telegraph stations, means and lines of communication, auxiliary and other enterprises and offices connected with the railway, as well as the property purchased, reconstructed, or newly built during the period of joint Soviet-Chinese administration had also been given back'." (33)

Russia, under the same treaty, was to have returned the historic control of the bases of Port Arthur and Dairen to China, but the Red Radio in Peiping said "Russia was invited to stay in those places."

"By retaining control at Dairen and Port Arthur inside Manchuria Russia will have a great degree of control of

the railroad since the Soviets will still hold all important terminals except Chanchun and Harbin." (34)

Now the Chinese Communists supposedly had the railway to operate by themselves. But on May 22, 1953 almost a year later a special dispatch carried in the China Union Press from Taipei said that the Soviet technicians in the (new) Harbin Railway administration had made the proposal for the double tracking of the Changchung railway, formerly known as the Chanchun-Mukden line, in order to facilitate better transportation in that part of the country.

Little has come out of China and the real story has yet to be told. From the history of the line to the present date there is every indication that the Soviets have got what they wanted out of China. It has been accepted for centuries that the Soviet Union is a "land-locked nation". Her desire to have access to a warm-water port has been paramount in her expansion in Asia. Her path of least resistance was China. She had already established herself as friend and protector of the weaker neighbour in the east. Her interest in the rail lines in Manchuria was historic, because she built one of the most important lines cutting the province in two. Port Arthur and Dairen are the bases she had long dreamed of in the warm waters of the Pacific.

Only time will tell if the line will be used against her as was once planned by the Japanese during World War II. And only time will tell if the Chinese Communists will suddenly decide that the Soviets have used their relationships to further the Soviets own desires of being protected on both sides by vast oceans.

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ECONOMIC REPORTS FROM THE UNITED STATES

By E. KANN (Los Angeles)

The Movies

Since that part of Los Angeles known as Hollywood always has been the metropolis of the cinema industry, it requires no apology to revert to the attempt to take a glance at the new look. All endeavors to remove the production of movies to other climes have failed, for the climate and the scenery of Southern California cannot possibly be duplicated elsewhere.

There is no denying that for the past six years the industry has been in the doldrums. This was due to diversified causes, the principal one being the appearance on the scenes of television. However, by now the novelty has worn off somewhat, and the populace is gradually returning to the cinema. This move is not entirely due to waning interest in T.V., but equally so to the production of better pictures and to important innovations, as CinemaScope, cinerama and the now-reviled 3-D. The increase in shapes and dimensions gave the cinema industry what it badly needed, namely a shot in the armature. Now movies are being talked about once more. On the other hand, there is a deterrent (as far as Los Angeles is concerned) to crowd the cinema theatres, namely excessively high entrance cost for good, first-run pictures. Some of these average $1.50, but others (like "The Cain Mutiny") demand an entrance fee of $1.75.

A month ago 20th Century Fox celebrated the first anniversary of CinemaScope. Within that space of time 8,000 theatres have installed the wide screen in America, apart from 4,000 abroad. Currently there are 24 CinemaScope pictures being shown throughout the world, and 114 are awaiting release by all film companies.

In the last week of September Cecil B de Mille sailed for Egypt to direct a new version of "The Ten Commandments". He expressed the opinion that within his more than 40 years experience production will be his greatest. He states that he projects to hire 30,000 people in Egypt, the largest number ever employed in one picture. In one scene alone he will use 20,000 persons and 15,000 animals. This will depict the Exodus. It was 31 years ago that de Mille produced his first version of the Ten Commandments. He then spent on the picture $1,000,000, a factor which caused Paramount to fire him. But when the film grossed $2,000,000, the company re-engaged him.

One film concern, R.K.O. Studios, has experienced many ups and downs during the past decade; probably more of the latter than of the former. About a month ago many rumours floated about regarding the fate of the concern. Talks originated when the studio began laying off employees throughout the plant. However, this is not the first time that a crisis has arisen in connection with the fate of the studios, especially since 1948, when the Texas millionaire Howard Hughes acquired a controlling interest. Early in 1954 Hughes bought out his stockholders after heated arguments over dwindling production and subsequent operating losses.

Recurrent rumours recently have hinted that other interests seek to buy Hughes out. Amongst the rumoured purchasers are Floyd Odlum, a long-time R.K.O. investor, and the Laurence Rockefeller—William Zeckendorf syndicate which reportedly might be angling to buy all Hughes diversified financial interests. Meanwhile the R.K.O. public relations force suffered considerably through the dismissal of 50% of the studio's press-agency talent. Two film producers also were dropped from the payroll. Informed sources point out that in 1954 R.K.O. finished one picture only, at a cost of $6,000,000, namely "Unconquered".

Prospects of Film Companies

From the foregoing narrative it will be deduced that the cinema industry has had a fairly good year through laying emphasis on quality—instead of quantity—production. Another favorable factor is the heavy cut in amusement taxes, which is not beneficial to the public, but retained by the theatres. The past summer netted excellent results to cinemas which are air-conditioned, as well as to 'drive-ins'. Though film stocks have had a good rise this year, the business looks speculative and produces but poor evidence of significant long term growth potentials.

Amongst 14 large film companies three do not pay dividends, namely Allied Artists Pictures, R.K.O. and Walt Disney Productions. The other 11 concerns are paying dividends which, at current prices, work out at less than 5% on an average. Popular Picture Producers are:

Columbia Pictures: which made spectacular earnings comeback in the past fiscal year, due mainly to the Academy Award hit "From Here to Eternity". Amongst recent releases and successes are "The Cain Mutiny" and "On the Waterfront", which latter picture was thrown out by the Hongkong Censor in mid-October, due to its being unsuitable for the Hongkong climate.

Paramount Picture: has a good box office record with its productions. It hopes to strengthen its position further through the Vista-Vision broad screen process, says United Business Service. The firm has a controlling interest in the leading Canadian theatre chain and furthers its interest in TV and in the Lawrence tube of colour TV.

20th Century Fox: sends me its report for the first six months of this year. From same it is interesting to learn that the 1953 quarterly dividend @ 25 cents has now been superseded by a 40 cents quarterly. Through buying in 125,000 of its own shares 20th Century has reduced its capitalization. The directors foresee earnings for the third and fourth quarters at about $1 each per share. Two oil and gas wells were successfully drilled on the company's Beverly Hills property, and drilling on a third well has just been undertaken. Amongst recent successful releases is "The Egyptian", to be followed shortly by "Desiree", "There is no Business like Show Business", "Black Widow", "Woman's World", "Carmen Jones" and "The Adventures of Hajji Baba".

American Broadcasting-Paramount Theatres: operate more than 600 movie theatres, five radio and television stations, and the ABC radio and TV networks. The stock has merely speculative appeal and growth prospects are poor. Income results mainly from telecasting profits.

Loew's, Inc: operates the leading M-G-M film company and the Loew's theatres. Under the anti-trust law the concern will soon split up its stock, giving each shareholder half a share in the producing business, and half a share in the theatres. The stock has risen to an appre-

ciable extent during the past 12 months, in conformance with good box office receipts and conservative theatre valuations.

Decca Records and Universal Pictures: Decca holds 73% of Universal's stock and wants more. Decca is doing poorly with its record business, and its earnings mainly reflect the equity in Universal. The latter is doing well, due to such film successes as "The Glenn Miller Story" and "Magnificent Obsession".

Walt Disney Productions: earned 90 cents for the year ended Sept. 30, but pays no dividend. However, the famous films turned out by Walt Disney are outstanding. Last semester's release "The Living Desert" is an epic.

Business Looks into the Future

It is by no means curiosity which causes business forecasts of an intelligent nature to be investigated and recorded. One of America's large concerns, the Weyerhaeuser Timber Company of Tacoma, Wash., requested the Stanford Research Center of Stanford University to analyze United States prospects for the next 20 years; the results were important for plans to spend huge sums of money for future developments. Taking America's population at 162 million, Stanford opines that by 1975 it will have risen to 212 million. This means that there will be 50 million more consumers. Employment, currently at 62.3 million hands, will most likely have advanced 20 years hence to 84.4 million. Individual income, at the close of 1954 represented by $253 billion dollars, will have reached 367 billion in 1975. Total U.S. output, currently returned at $356 million, is estimated to reach in 20 years from now $586 billion.

Basic assumptions of the Stanford study are these: (1) All-out war will be avoided. However, spending for defense purposes will remain high. (2) No radical advances in technology will make themselves felt that might accelerate the normal pace of business growth. (3) While business activities will have ups and downs, the swings of the business pendulum will be much more moderate than in the past. The occurrence of business depression of a sizable nature is believed to be over. The forecast is for a solid but not spectacular growth.

The nature of the working force is likely to change as time goes on. There will be less youngsters and oldsters than now. More young people are expected to stay in school, and more aged are certain to retire. This as a result of a higher standard of living and more liberal retirement allowances. The number of employed women will be on the increase. By 1975 as many as 37.5% of the labor forces will be female; this means that about 4 women workers will be active amongst 10 male employees. In 1950 the ratio was 31.3%. The problem of unemployment will not be licked as time goes by. At present about 5% of the working forces are out of a job; by 1975 it is estimated at about 4%.

Stanford Research arrives at the conclusion that productive efficiency is expected to divulge considerable gains. The average factory work week is now 39.7 hours; but by 1975 it will have dropped to 37.1 hours on an average. On the other hand, industrial production is estimated to move from the present level of 124% of the 1947/49 average to 172% by 1965, and to 222% in 1975.

Every worker is expected to be turning out a greater volume for an hour of labour than he does now. The current output of an hour's work is estimated at about $2.70; 20 years from now it is expected to reach $3.65. American efficiency can be envisaged by pointing to the fact that by 1975 the U.S. worker is likely to produce about 2½ times as much as he did in 1929.

The study culminates in the view that over the next 20 years the country will be busy producing and that there will be a relative abundance of goods. Output of hard goods, ranging from electrical machinery to electric irons, is placed at 221% in 1975 (of the 1947/49 averages), compared with 135% to-day. Based on the 1947/49 averages this country will be turning out 2½ times more motor cars, appliances for the household, furniture and industrial goods. Output of soft goods (food, gasoline, clothing, paper, rubber goods) is not expected to expand so much. The ratio now is 116%; by 1975 it will probably reach 198%.

Regarding the construction industry: The researchers opine that by 1975 the outlay will reach $51.7 billion, compared with this year's boom figure of 36.5 billion dollars.

Items of General Interest

It is with deep regret that I have to report the demise in September of an old China hand, Mr. Arthur de Carle Sowerby at Washington, D.C. at the age of 69. The late Mr. Sowerby was born in Taiyuan (Shansi) and was trained as a naturalist, specializing in species found in China. He was one of the leading lights of the Shanghai branch of the Royal Asiatic Society and acted for many years as custodian of the Society's Museum. His publications in the realm of natural science are numerous. About 30 years ago Mr. Sowerby founded and edited "The China Journal of Science and Arts," a Shanghai Monthly which made considerable contributions to science in China. For many years past Mr. Sowerby was plagued by chronic arthritis in his hands, an ailment which caused to the deceased much mental and physical pains.

Goodyear Tire & Rubber Co. announces the introduction of a new tubeless super-cushion tire which will appear shortly on many new 1955 model automobiles. The new invention, after many years of research, is based upon a new manner of treating tire cord. The company claims the following advantages for its innovation: Puncture protection of a kind never before offered; then blow out protection, providing a greatly increased margin of safety. Thirdly, a quieter, smoother mileage than is afforded by to-day's standard tires, plus even greater mileage. And last, but not least, no higher price than the current standard tire and tube.

At the same time another large tire manufacturer, B. F. Goodrich, announces the introduction of its patented tubeless tire which is now being placed on the market under the style of "Safetyliner". A patented inner liner, that is part of the tire itself, is a prime feature of the new tire, changing dangerous blowouts to "slowouts".

Due to miners' strikes in Chile, as well as in Montana, copper in this country is in short-supply. Business in London is being done at the equivalent of 37 cents a pound, but in this country the price of 30 cents is being maintained for the time being. In order to alleviate the distinct shortage of copper supplies in this country, it was suggested that Government should supply the market with what copper quantities are needed from stockpiles. However, this cannot be done, because then the authorities would appear as strikebreakers, thus causing bitterness amongst labor organizations. And the companies producing copper on the American Continent do not wish to raise prices for fear of inviting competition from aluminium and plastics.

During the week ended October 16 the New York stock market recorded considerable declines, probably 8 points as far as the Dow-Jones industrial averages are concerned. Utilities also declined, while railroad shares divulged slight advances. As emphasized in my recent reports, it stands to reason that the market cannot possibly

(Continued on Page 661)

ELECTRIC POWER SUPPLY IN THE FAR EAST

(Extract from a Report by the UN Economic Commission for Asia and the Far East)

The total installed capacity in 1952 of the generating plants of the public utility electric supply undertakings in the ECAFE region (not including mainland China) was about 12.96 million kilowatts (kW) and the energy production about 56,000 million kilowatthours (kWh). These figures represent a 5% increase in installed capacity and a 7.9% increase in production over corresponding figures in 1951. The magnitude of electric power development in the ECAFE countries is much less than in the industrially advanced western countries. The rate of growth of the industry is also less than in the western countries.

The comparatively larger percentage increase in production as against installed capacity in the ECAFE countries indicates the shortage of power in the region. The capacity has not yet caught up with the demand. Japan, having only a little over 11% of the total population of the ECAFE countries (not including mainland China), accounts for 71% of the total installed capacity and 79.5% of the production in the region.

Generation: For the Far Eastern region as a whole 58.5% of the total installed capacity comprised hydro-electric plants which, however, accounted for 74.4% of the total production. Nearly 82.5% of the hydro plants in the region are concentrated in Japan and so the distribution of generating plants of different types in the region outside Japan would show the preponderance of thermal power stations, particularly steam stations as shown below:

	Far Eastern region		Region without Japan	
	Aggregate capacity (%)	Total production (%)	Aggregate capacity (%)	Total production (%)
Steam	38.5	24.5	54.0	48.0
Diesel	3.0	1.1	10.6	5.5
Hydro	58.5	74.4	35.4	46.5
Total ..	100	100	100	100

It is necessary to point out that despite the smaller percentage of installed capacity of the hydro plants in the region exclusive of Japan, these plants have been responsible for a comparatively larger energy production, which indicates that the hydro plants generally operate at higher plant utilization factors.

The preponderance of thermal power plants in the countries other than Japan does not necessarily mean that these countries are more favourably situated for developing thermal power stations or that their hydro power potential is meagre. In many countries the hydro-electric power potential is substantial and can meet a good part of the power requirements, but as hydro projects usually involve heavy capital investment and also much longer time for completion, steam-power station projects are undertaken as short-term development plans.

For the region as a whole, against the aggregate installed capacity of 4.98 million kW of steam-power plants, the total energy production in 1952 was 13,735 million kWh, which works at 2,750 kWh for every kW of installed capacity. This figure indicates the comparatively poorer plant utilization in the countries of the region. In European countries, this figure is around 3,400 and the US 4,900.

About 86% of the capacity of steam plants is concentrated in stations with an individual capacity of 25,000 kW and above; the corresponding figure for hydro stations is 66%. This points to the well-known trend towards concentration of power generation in a few large-size generating plants. In the case of diesel stations, however, installations with a capacity of 1,000 kW and less accounted for about 40% of the total capacity.

Fuel Consumption: Available information on fuel consumption in steam and diesel stations is not adequate to permit definite conclusions, but it would appear that the coal consumption in steam stations was about 0.8 to 0.9 kg per kWh generated. This figure is perhaps higher than in industrially advanced countries (the average figure in the United States is 0.55 kg per kWh), but is explained by the fact that in most power stations in the region, the individual generating sets and boilers are of small capacities which are not inherently capable of the high thermal efficiencies possible in the modern high-power installations. In recent years, large-size steam-power units have been installed in the region: in India 50,000 kW; in Singapore, 25,000 kW; in Hongkong, 20,000 kW. This will in due course be reflected in the progressive reduction in fuel consumption in the future.

New Plants: Among the power stations and new generating plants brought into commission in 1952 are: (a) the steam-power plants in Hongkong, 20,000 kW; India, 63,250 kW (comprising 12 sets ranging in capacity from 1,500 kW to 12,000 kW); Japan, 79,000 kW; Malaya, 40,000 kW (first installation of the Connaught Bridge Power Station); and Singapore, 25,000 kW (first installation of the new 150,000 kW Pasir Panjang Power Station); (b) the hydro power plants in Taiwan, 26,500 kW; India, 140,000 kW (14 sets ranging in capacity from 1,500 kW to 22,000 kW); Japan, 181,000 kW; and Pakistan, 22,000 kW (Rasul Hydro Station).

Energy Consumption: While the magnitude of the electrical energy consumption of industrial undertakings in a country is an index of its industrial development, the amount of energy used by domestic or residential consumers indicates the general standard of living or the extent of modern amenities enjoyed by the people. One common feature of the pattern of electrical energy consumption in the countries of the region is the comparatively small percentage of energy used for domestic purposes; the energy generated in these countries is used for the most part by industries. Figures of electricity consumption exclusively relating to domestic consumption are not available, but from the table at the end of this report, it will be observed that inclusive of commercial lighting and small power users, the domestic consumption in 1952 was 8,698.7 million kWh, which is roughly 21.6% of the total energy sales by the public utilities, while the industries have accounted for nearly 76%. It is believed that for the next several years, countries of the region will place more emphasis on industrial production and the present pattern of electrical energy consumption is therefore expected to continue.

A scrutiny of the figures in the table, however, shows that Cambodia, Hongkong and the Philippines have used more electricity for domestic purposes than for industries. This is probably understandable in the case of Hongkong, which is a highly concentrated urban region. (In fact it will be observed that Singapore, which is somewhat similar to Hongkong, has also recorded a domestic consumption nearly equal to the quantity of energy used by the industries). But the fact that the Philippines have a domestic consumption several times higher than that of their industries is a remarkable feature.

The figures for electricity consumption under industries given in the table cover only the energy supplied by public utility stations. Besides, several industries have their own generating plants with which they obtain part or the whole of the electrical energy requirements for the industry. In some cases such self-producing industrial power plants have been installed for reasons of their inherent economy. As an example may be cited the case of a paper-making factory, which requires both power and steam for its operation. It is often found advantageous to install a self-contained power plant in which the turbines are of the bleeder type so as to provide both process steam

and power for the factory. The aggregate installed capacity of such industry-owned power plants in the ECAFE region is 2.78 million kW and the energy production 10,188 million kWh, these figures being roughly 21.6% and 18.2% respectively of the corresponding total figures for the public utility industry.

Projects: All the countries of the region are pursuing schemes for power development to meet increasing demand for power. Thermal power stations are planned in many cases to satisfy, with the least possible delay, the pressing demand for power; they are to be followed by hydro-electric power stations (wherever possible) planned and built under a co-ordinated programme.

Ceylon: Ceylon is planning the construction of a further stage of the Lakspana Hydro-Electric Scheme at Norton Bridge. This construction would add to the capacity of the system by 25,000 kW, and although the details of the scheme have not yet been worked out, it is understood that the scheme would involve the construction of about 170 miles of 132 kV/66 kV transmission lines and the installation of 10 major transformer stations with an aggregate capacity of 60,000 kVA. (kV: kilovolts. kVA: kilovolt ampere).

Taiwan: Taiwan has prepared a comprehensive five-year development plan which provides not only for the installation of new generating plants, but also for the rehabilitation of plants damaged in the war and by other natural causes, such as floods, and the reconstruction and improvement of existing plants. The plan also covers the extension of the transmission and distribution system in Taiwan. Under the plan as originally formulated, it was proposed to install an additional generating capacity of 300,750 kW in eleven generating stations, both hydro and steam. Modifications to the programme were subsequently found necessary and the programme as on hand includes the following:

	(kW)	
Tungmen Hydro Station (rehabilitation)	21,000	
Wu-Sheh Hydro (new)	20,000	
Wu-lai Hydro Station (extension of second unit)	11,250	
Li-Wu Hydro Station (extension of second unit)	16,000	
Tien-leng Hydro Project (third unit peaking scheme)	26,500	
Improvement to Sun-Moon Project Plants	—	
Nan-pu Steam Station	40,000	
Pei-pu Steam Station (extension)	40,000	
Sung-shan Steam Station (extension)	5,000	(completed)
Peng-nu Steam Station	1,000	
Transmission and distribution schemes	—	
Total	180,750	

The 100,000 kW Chu-keng Hydro-Electric Project, which was originally included in the Five-Year Plan, has been postponed and is being reconsidered.

India: India's first Five-Year Plan (1951-56), which gives a high priority to irrigation and power projects, provides for (a) Eighteen new hydro-electric projects which would add to the total installed capacity by 599,000 kW at the end of the plan period (March 1956) and by 853,000 kW when these projects are fully completed; (b) Twenty-four new thermal projects which would add to the total installed capacity by 398,000 kW at the end of the plan period and by 499,000 kW when the schemes are fully completed; (c) Extensions to seven existing hydro-electric power stations resulting in an additional installed capacity of 208,000 kW at the end of the plan period; (d) Extensions to eighteen existing thermal power stations, bringing in an additional installed capacity of 275,000 kW; (e) A substantial mileage of transmission lines and additional transformer station capacity.

Japan: Japan has a very active power development programme. This includes 15 steam-power station projects, 66 hydro-electric projects of the run-of-the-river type and 9 hydro-electric projects of the reservoir type. The size of the steam station units ranges from 75 to 22 MW and the maximum steam pressure and temperature are 107 kg/cm² and 543°C (1,500 lb/sq. in. and 1,000°F). The high tempo of construction activity in Japan is due to the acute power shortage conditions experienced in the post-war years. The power demand has been continually rising, keeping ahead of the capacity of the power systems. The capability of the electric power systems would increase from 6,857,000 kW in December 1953 to 9,764,000 kW by December 1957 under medium hydro conditions, provided the construction programme, as planned as of October 1953, is carried through. This would mean an increase of 42 per cent of the plant capability in four years. On the basis of unrestricted load demand, the peak demand is expected to rise from 8,400,000 kW in December 1953 to 10,940,000 kW in December 1957. This would still leave in 1957 a small margin of deficiency in the peak capability of the power systems of the country, although this deficiency would be comparatively much smaller than at present.

Pakistan: The construction programme in Pakistan includes large-capacity steam-power plants at Karachi, Lyallpur (Punjab), Montgomery (Punjab), Hyderabad (Sind) and Sidhirganj (E. Bengal). The authorities are also undertaking three major hydro-electric schemes which will have a total ultimate installed capacity of 391,000 kW: Canal Falls Project (Punjab), 81,000 kW, Karnafully Scheme (E. Bengal) 160,000, Warsak Hydro-Electric Scheme (N.W.F.P.) 150,000 kW.

Philippines: Besides several small hydro-electric generating stations, the Philippines have on hand the installation of a second 25,000 kW set at the Maria Cristina Falls Hydro Station. Construction is also in progress on the first stage of the Agno River Hydro-Electric Project under which three 25,000 kW generating sets will be installed.

Hongkong: Hongkong completed a 20,000 kW extension (Electric Co., Ltd. on the Island).

Singapore: At Singapore two 25,000 kW turbo sets are in service at the Pasir Panjang Power Station. The construction of the subsequent stages of this 150,000 kW is in progress.

ELECTRICITY CONSUMPTION BY CLASS OF UTILIZATION IN 1952

(figures in brackets refer to 1953)

(million kilowatt hours)

Country	Domestic and commercial light and small power	Heavy light industries	Public lighting	Traction	Water works and sewage disposal	Irrigation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cambodia	12.5	5.4	1.0			
Taiwan	259.4	798.8	**	**	**	17.8
	(300.8)	(905.3)	**	**	**	(18.7)
Hongkong	143.0	22.6	0.9	11.3	2.9	
India	965.5	3,206.5	73.9	324.8	219.8	215.2
Japan	6,415	25,833				
Korea	138.9	281.7	Incl. in	10.6		11.9
	(129.4)	(303.4)	col. 2	(8.0)		(9.1)
Malaya	174.5	337.6	**		**	**
Philippines	414.1	66.4	13.7			
Singapore	85.9	96.4	1.6			
Viet-Nam	89.9*	110.9†	5.2	1.8		
Total	8,698.7	30,759.3	86.3	348.5	222.7	244.9

** Included in columns 2 and 3.
* Includes portions that should go into columns 3 and 4.
† Probably includes supply by private industry owned undertakings.
No data available from China, Burma, Ceylon, Indonesia, Laos, Thailand, North Borneo and Pakistan.

THE PETROLEUM INDUSTRY OF JAPAN

THE PRODUCTION OF PETROLEUM

The discovery of oil in Japan dates far back. The oldest record of petroleum is found in the "Nihon Shoki", a history, in which mention is made that "inflammable earth and inflammable water were presented from Echigo Province" (now Niigata Prefecture) to Emperor Tenchi in the 7th year of his reign (the middle of the 7th century). No particular records are available on oil during the subsequent 600 years until the Kamakura era (13th century), when a royalty was said to have been collected on petroleum. It is known that in the Edo era (from the 17th century to the middle of the 19th century) oil was collected from wells sunk manually and that distillation was done by alembics, all in Echigo Province. The quantity was small, and the oil was used for illuminating purpose in the vicinity or as medicine.

The introduction of European civilization at the beginning of the Meiji era (from 1868) sharpened the interest in petroleum. The skeleton of an oil belt running down from Hokkaido toward the south along the Japan Sea coast and turning south-east to the Kanto district and into the Pacific Ocean, was discovered in 1872 by an American geologist, Benjamin Smith Lyman, who had been invited to Japan by the Government. An increasing number of people engaged in the production as the years passed. By 1888 Kurokawa, Niitsu, Amase, Myohoji, Matsunoyama and Gentoji oil fields in Niigata Prefecture were developed by manual drilling to an annual crude oil production of over 12,000 kilolitres.

It was only a small scale local industry, but records show that there were in Niigata Pref. alone over 430 companies and partnerships with a total capitalization at Y5,535,300 at the end of 1891. In 1888 the Nippon Oil Company Limited was established, with a capital of Y150,000, which in 1890 imported cable-tool drilling equipment from America. It proved successful at the Amase field, and brought a substantial increase in production. The introduction of the new drilling equipment helped the petroleum mining industry to achieve epoch-making progress and take shape as a modern industry. As Higashiyama field, Niigata Pref., became active, the Hoden Oil Co. was established in 1893. In those days of the oil boom, corporation and partnerships mushroomed with consequent abuses. For the sound development of the industry the Hoden Oil Co. took the initiative in advocating the amalgamation firms, itself combining with over 120 producers, thus reforming the industry by 1921, when the Hoden oil and Nippon Oil merged.

Meanwhile, the Nishiyama, Higashiyama, and Niitsu fields were developed rapidly by cable-tool drilling, helping to make the Japanese petroleum industry very prosperous. Production reached the zenith in 1908 or thereabout, and then dropped as oil deposits in shallow zones had dwindled. It was not possible for the cable-tool equipment to penetrate into deeper formations. Rotary drilling equipment brought from America by the Nippon Oil Co. in 1912 made deeper drilling possible and brought a gradual increase in production. When a gusher was brought in at Kurokawa field, Akita Pref., the production reached 470,000kls. in 1915.

World War I brought a sharp increase in consumption, being covered by increased importation. Japan was no exception after that war in suffering from the worldwide depression of petroleum prices as a result of over-production in America. Producers were hit hard by foreign oil, and the Nippon Oil Co. was barely able to finance its production branch with what profit it had derived from importation, refining and marketing, but weak, smaller producers were forced to the wall. Production during 1926-1934 fluctuated between 250,000 and 300,000kls. per year. In 1928 the Takamachi field, Niigata Pref., was opened by the Nippon Oil Co. and Nakano Mining Co., and in 1932-1933 the Innai and Kokuni fields were developed by Nippon Oil Co., Nakano Mining Co. and Asahi Oil Co.

To protect and foster the petroleum mining industry a law known as "Oil Fields Exploratory Drilling Encouragement Law" was enacted in 1927. Revoked in 1934 it was re-enacted in 1935, under which some 100 exploratory wells at 50 promising areas were projected in a 7 year program. In 1938 the "Petroleum Resources Development Law" was enacted to give government subsidies on test wells projected in pursuance of national policy, and in 1939 arrangements were made to excavate shafts and drifts for the secondary recovery of oil remaining in the old fields. This project was put into operation with government subsidies in 1940 at the Higashiyama field. A protection on price made it possible, during those days, for medium and smaller producers to operate commercially. Producers in these groups increased.

Following the development of the Innai field, the Yabase field in Akita Pref., the biggest in Japan, was developed from 1940 by the Nippon Mining Co. and the Nippon Oil Co.—a production in excess of 400,000kls. per year was maintained from 1936 to 1938. In 1940 the Teikoku Oil Resources Development Co. was established by the government for the exploration and development of idle mine lots, as the deteriorating world situation made it imperative to ensure immediately the supply of petroleum.

Entertaining hopes to get a supply from overseas, the Government had the Teikoku Oil Resources Development Co. combine with the Kyowa Mining Co., and in 1941 had the Teikoku Oil Company Limited established with the Teikoku Oil Resources Development Co. as the nucleus. On government urging subsequently, the Teikoku Oil took over the production branch of the Nippon Oil Co., Nippon Mining Co., the Asahi Oil Co., and the Nakano Mining Co. and a merger was effected among the Taiheiyo Oil Co., the Dai Nippon Petroleum Mining Co., and the North Saghalien Oil Co., and thus the Company came to control most of the oil fields in Japan.

When World War II broke out, the Teikoku Oil Co. concentrated efforts on the rehabilitation and operation of oil fields in South-East Asia, but as the tide of war turned the importation of South-East petroleum became difficult in 1944, finally to be cut off. Efforts were then directed to develop domestic fields, the Shonai field in Yamagata Pref. and the Nippoda field in Niigata Pref. being opened, but the production fell short of expectations due to the shortage of man power and equipment.

Before the war several Japanese companies engaged in exploration and production in Formosa, Saghalien, Borneo, Ecuador, and Mexico. Operations in the last 3 countries did not go further than geological surveys and wildcattings, but some success was achieved in the first two. The North Saghalien Co. operating in the Soviet zone of Saghalien since 1926, shipped to Japan its own crude oil as well as crude oil bought from the Soviet operated fields. In Formosa, the Nippon Oil Co. succeeded in its prospecting, and production increased

year by year to about 10,000kls. per year. All of these overseas interests were lost as a result of the war.

Domestic oil fields after the war deteriorated considerably, production falling off steadily due to the suspension of exploration, extravagant drillings toward the end of the war, and unsettled social conditions. In 1948 production dropped to 170,000kls. a year, the lowest in the Showa era which began in 1926. Subsequently, exploration and development of petroleum resources were stepped up under government subsidies as well as under the active guidance of the Natural Resource Section, General Headquarters of the Occupation Forces.

With the revival of exploration and development of oil fields, since 1946 the Teikoku Oil Co. discovered or developed deeper formations or new oil bearing formations at the Hachimori, Yabase, Nishiyama, Betsuyama, Shonai, and Narabashi fields, while the Daido Oil Co. made a similar discovery at Kaji field, and the Fuji Mining at Yamori. The most striking development was the discovery and development of deeper formations, one after another, at Yabase, contributing greatly toward a remarkable increase in production, which in 1951 exceeded 360,000kls., being backed by increased known reserves.

In 1952, the "Petroleum and Inflammable Natural Gas Resources Development Law", drastically revising and superseding the "Petroleum Resources Development Law" was enacted, incorporating certain technical restriction for the conservation of natural resources and also for furthering assistance on production and on secondary recovery. With the lifting of the control on crude oil, in force since the war, the Japanese petroleum industry is now in the world competitive market. It is believed most urgent to provide positive protective policies such as the prompt establishment of an import tariff, subsidy on production, etc. in order to help active development of the petroleum resources and to foster the maintenance and progress of the domestic petroleum mining industry.

Present Situation: The Teikoku Oil Co., which represents and leads the production branch of the industry, produces over 95 per cent of the indigenous crude oil production, having a practical monopoly. There are over 60 producers, including medium and smaller concerns, but information on these medium and smaller producers is not available.

Crude Oil Production

(unit: kilolitre)

1945	245,452
1946	213,400
1947	203,179
1948	178,702
1949	218,295
1950	328,467
1951	371,588
1952	339,212

THE REFINING OF PETROLEUM

The year 1899 marked the beginning of the Japanese petroleum refining industry as a modern enterprise. Side by side with the development of indigenous crude oil production, the refining industry for processing indigenous crude oil registered a steady advance from the late Meiji era to the early Taisho era (1910-1915). As the demand for petroleum increased, an increasing number of refiners began to process foreign crude oil from about 1924, and the refining industry maintained steady progress under favourable conditions existed at home and abroad.

Severe competition among the six major oil companies, Japanese and foreign, at the time of the third worldwide depression, which lasted from 1929 to 1933, depressed market prices so much that Japanese oil companies suffering under such unfavourable conditions were reduced to a difficult position and forced to undergo readjustments in dark unsettled days.

In 1934 the enforcement of the Petroleum Industry Law (which required oil companies to reserve in stock 6 months supply and refiners and importers to secure license) and the steps taken by the Government to foster refining, helped to stabilize the industry and the number of refiners increased to over 40.

Prior to the outbreak of World War II the importation of crude oil fell off gradually, and an increasing number of facilities had to suspend operations.

Beginning with the voluntary merger in 1940 of Nippon Oil Co. and Ogura Oil Co., the Government urged the reorganization of the industry, and by the end of 1942 refining companies were consolidated into these 8 companies; viz. Nippon Oil Co., Nippon Mining Co., Toa Nenryo Kogyo Co., Daikyo Oil Co., Maruzen Oil Co., Koa Oil Co., Mitsubishi Oil Co., and Showa Oil Co.

Conditions turned unfavourable, the Pacific coast refineries were made the targets of strategic bombing from the end of 1944, and lost about 60 per cent of prewar capacity being reduced to 1,140,000 kilolitres (7,180,000 bbls.) capacity per year when the war ended.

Although oil fields and the Japan Sea coast refineries, (except Akita Refinery of Nippon Oil Co.), escaped war damage, the petroleum industry right after the war was in utter confusion on account of serious unbalance of supply and demand as a result of the poor conditions of the Pacific coast refineries through war damage and excessive operation during the war, the decay of oil fields through excessive drilling, and the difficulty to import crude oil.

Furthermore, as the Pacific coast refineries were closed in November 1946 by order of the Supreme Commander for the Allied Powers, refinery operation was limited to around only 200,00 kilolitres (1,260,000 bbls.) per year of indigenous crude oil at seven Japan Sea coast refineries. The supply of petroleum products in those days was short, but the minimum supply required was maintained by the release of products imported under the GARIOA fund.

The directive permitting foreign investments in Japan, issued by GHQ in 1949 with a view to saving GARIOA funds and to enable Japanese economy to be self-supporting, heightened the tendency on the part of Japanese oil companies tieup with foreign firms. In July 1949 approval was given for the reopening of the Pacific coast refineries which had long been awaited. With this the importation of crude oil was also resumed, and the Japanese petroleum industry was offered an opportunity to revive.

Present Situation

The rehabilitation and reconstruction of the reopened Pacific coast refineries was realized quickly. The importation of crude oil by GARIOA fund was started in January 1950, but from October of that year it was replaced by commercial importation. The petroleum industry, as a link in the world petroleum market, now is displaying a greater activity than in pre-war days.

The Government has maintained the system of allocating refinery throughputs of imported crude oil to refineries since the importation of crude oil was first started in January 1950, these allocations totalling as follows:—

Table I. Allocation of Imported Crude Oil for Refinery Throughput

(Unit: Barrel per day)

From	1950	1951	1952	1953
January	17,000	35,000	74,350	77,250
April	26,000	44,450	77,250	*85,000
July	32,000	53,300	77,250	85,000
October	34,500	57,800	77,250	85,000

* Effective March 1953.

Note: Effective April 1952, the crude oil allocation for refinery run was discontinued and became nominal. Refineries have been allowed since then freely to process whatever quantities they desire within the limit of supplies available by the foreign exchange allotted to them. (This foreign exchange allocation for crude oil importation, however, is based on the nominal crude oil throughput allocation above).

In addition, about 340,000 kilolitres (2,140,000 bbls.) per year of indigenous crude oil is processed in the Japan Sea coast refineries, about 95 per cent of which comes from Teikoku Oil Co.

Before the war, a major portion of the petroleum requirements—60 per cent of petroleum products and 40 per cent of crude oil—had to be imported, mostly from America. As a basic principle was established in the post-war period to import crude oil and refine it in Japan, similar to the world tendency to refine in the consuming area, and with the induction of investments by foreign oil companies and the resultant assurance of crude oil supplies and introduction of techniques, the refining industry has now been firmly established, and efforts are being exerted to bring it up to world standards.

A summary of refining capacities is given below. Against the total capacity of 136,600 bbl/day, the current operating ratio is about 67 per cent, leaving a substantial unused capacity.

Table II. Petroleum Refinery Capacities (Topping)

(as of December 1952)

Japan Sea Coast			Pacific Coast		
Company	Refinery	Capacity bbl/day	Company	Refinery	Capacity bbl/day
Nippon Oil	Kashiwazaki	1,415	Nippon	Yokohama	17,495
	Niigata	2,076	Petroleum	Kudamatsu	8,500
	Akita	5,558	Toa Nenryo	Shimizu	7,500
	Hokkaido	213	Kogyo	Wakayama	15,000
			Daikyo Oil	Yokkaichi	16,271
Showa Oil	Hirasawa	2,975	Maruzen Oil	Shimotsu	10,612
	Niigata	5,787		Matsuyama	3,356
			Koa Oil	Marifu	12,000
Nippon			Mitsubishi Oil	Kawasaki	11,882
Mining	Funakawa	2,931	Nippon		
			Paraffin	Tokuyama	904
			Taiyo Oil	Kameoka	1,993
Total		20,995			115,653

Although the demand for petroleum products registered a sharp increase as the rehabilitation of the post-war economy progressed, a supply capacity substantially greater than the pre-war days and the assurance of the supply of crude oil enabled the maintenance of a balanced supply and demand. Petroleum which had been under control since 1937 was completely decontrolled and made free in July 1952. In 1952 the supply capacity, increasing at a greater pace than the increase in demand, brought a sign of gradual over-supply. A cutback in crude and a gradual increase in demand, however, modified the burden of heavy inventories. The situation however changed from October 1952, with the fall demand season and prolonged coal and electricity strikes and the stepped up conversion from coal to fuel oil, which brought a substantial increase in demand, especially for fuel oil, and refinery production was again advanced from the end of the year to cope with the rising demand.

Table III. Consumption of Petroleum Products—(1950-1952)

(Unit: kilolitre or ton)

Year	Grand Total kl.	Gasoline kl.	Kerosene kl.	Gas Oil kl.	Fuel A&B kl.	Fuel C kl.	Lube Oil kl.	Sub Total kl.	Asphalt ton	Wax ton	Grease ton	Sub Total ton
1950	2,089,377	413,299	76,784	208,329	928,607	182,528	199,453	2,009,000	62,991	7,167	10,219	80,377
1951	3,403,453	745,996	134,174	350,238	1,539,308	297,517	246,816	3,314,049	65,874	9,360	14,170	89,404
1952	5,365,195	1,439,306	108,389	388,892	2,082,172	920,408	290,520	5,229,687	110,808	12,568	12,132	135,508

Table IV. Estimated Supply and Demand for 1953 Fiscal Year

(Unit: kl.) By Mine Bureau, Ministry of International Trade and Industry

	Gasoline	Kerosene	Gas Oil	Fuel Oil	Lube Oil	Grease	Asphalt	Wax	Total
Opening Stock	183,492	26,784	39,259	303,558	54,500	3,400	6,800	2,400	620,193
Estimated Production	1,552,500	160,350	546,825	2,158,320	244,500	24,000	106,875	21,420	4,814,790
Import Program	262,400	—	—	2,024,122	15,000	—	—	1,000	2,302,522
Total Supply	1,998,392	187,134	586,084	4,486,000	314,000	27,400	113,675	24,820	7,737,505
Estimated Demand	1,750,000	140,000	540,000	4,120,000	290,000	24,000	120,000	15,000	6,999,000
Closing Stock	248,392	47,134	46,084	366,000	24,000	3,400	(—)6,325	9,820	738,505

Note: 1. It is assumed that 85,000 bbl/day of imported crude oil and 340,000 kls/year of indigenous crude oil will be processed.

2. Percent of the yield of products from imported crude oil is as follows:

Gasoline	Kerosene	Gas Oil	Fuel Oil	Lube Oil	Asphalt	Wax	Home Fuel	Loss	Total
30%	2.5%	11.2%	41.23%	4.5%	1.35%	0.42%	6.5%	2.3%	100%

Table V. Importation and Production of Crude Oil

(Unit: kl.)

	Importation					Production	
	Mid. East	U.S.A.	Borneo/Sumatra	New Guinea	Total	Japan	Total
1952 Jan./Dec.	3,490,576	127,168	677,783	136,769	4,432,296	339,212	4,771,508
	78.7%	2.9%	15.3%	3.1%	100% (92.9%)	(7.1%)	100% (100%)

Table VI. Refinery Production and Importation of Petroleum Products

(Unit: kl. or ton)

Production (Jan.—Dec., 1952)	Gasoline kl.	Kerosene kl.	Gas Oil kl.	Fuel A, B kl.	Fuel C kl.	Lube Oil kl.	Sub Total kl.	Asphalt ton	Wax ton	Paraffin Oil ton	Grease ton	Pitch ton	Sub Total ton	Grand Total ton
Japan Sea Coast Refineries	109,620	30,214	26,423	154,738	56,223	54,144	431,362	39,847	1,426	118	444	—	41,835	473,197
Pacific Coast Refineries	1,278,983	80,979	397,159	1,467,476	652,108	178,466	4,055,171	56,972	10,081	—	234	6,799	74,086	4,129,257
Total	1,388,603	111,193	423,582	1,622,214	708,331	232,610	4,486,533	96,819	11,507	118	678	6,799	115,921	4,602,454
Importation	133,720	1	30,396	505,353	362,271	26,409	1,022,150	—	996	—	1,229	—	2,225	1,024,375

The first stage of the rehabilitation and reconstruction to increase refinery production was completed within a little over 2 years from the reopening, and the refining industry has already built up refining capacities in excess of demand. It is now in the second stage of modernizing facilities and techniques for improving quality.

The refineries were ready during 1951 to meet fully the demand for products except fuel oil, the per cent consumption of which was very high compared with the refinery yield per cent. Rationalization of refining is now under way with a view to reducing refining costs and also for the manufacture of high quality products with the object of meeting increasing demand for high quality products in Japan and also for possible exportation.

Lube oils, except a very few speciality lubricants for limited equipment, are now all available. As to solvent refining and solvent dewaxing facilities, etc., the construction of some of which was started last year one after another some have been completed already. These speciality products are fully competitive with imported products, and it is thought that before long the importation of these products will become wholly unnecessary as expansions and additions to these facilities are carried out.

In order to provide for the anticipated rapid increase in the requirements for higher octane gasoline through the improvement of the compression ratio of Japanese made motor vehicles, the increase in the number of foreign motor vehicles in use, and increasing use of air-craft, plans for the construction of thermal reforming facilities and catalytic cracking facilities for the manufacture of higher octane gasoline have been formulated and some of these are already under construction. They are expected to be complete by Mid-1954.

In view of the international character of petroleum, the industry is striving further to improve techniques, modernize facilities and rationalize the enterprise in an endeavour to reach the world standard as quickly as possible and thereby to supply domestic consumers with quality products at low costs and to accommodate Far East countries with exports.

Table VII. Installation of Facilities for the Manufacture of Higher Octane Gasoline

Company	Refinery	Type of Facility	Capacity (bbl/day)
Nippon Petroleum Refining	Yokohama	Fluid Catalytic Cracking	5,050
	Kudamatsu	Platforming	1,180
Toa Nenryo Kogyo	Wakayama	Fluid Hydroforming	4,200
Showa Oil	Kawasaki	Platforming	1,350
Maruzen Oil	Shimotsu	Fluid Catalytic Cracking	2,700
Mitsubishi Oil	Kawasaki	Platforming	2,500
Koa Oil	Marifu	Platforming	1,300
Daikyo Oil	Yokkaichi	Houdriflow and Catalytic Polymerizating	3,600
Total			21,800

THE JAPANESE CEMENT INDUSTRY

Though it is not definitely known when Portland cement was first imported into Japan, Custom House Statistics of the year 1870 reveal that about 8 tons were imported in that year. In order to obtain the supply of cheap, home-made cement for the construction of the Yokosuka Shipyard, Mr. Tsugi Hiraoka, Chief of the Shipbuilding Bureau, together with Mr. Saburo Utsunomiya, built an experimental cement-producing equipment in the Yard of the Engineering Bureau in 1871. As they were successful in producing cement of good quality, Hiraoka and Utsunomiya endeavoured, unsuccessfully, to persuade some businessmen to build a commercial plant. Consequently, they came to the conclusion that the Government should undertake the manufacture of cement, and accordingly submitted a request to the Minister of Industry to build a Government plant. In due course, a Government-owned cement plant was built by the Engineering Bureau on the banks of the River Sumida in Tokyo, in 1872. This plant, together with other Government-owned factories, were, however, abolished in the year 1881, due to financial stringency, the cement plant being transferred to Mr. Soichiro Asano in July 1884.

Prior to this, in 1881, the first cement company was established at Onoda, Nishisuemura, Asa-gun, Yamaguchi Prefecture, by Mr. Jumpachi Kasai and others, the production of cement being commenced from April 1883. Many other cement companies were established successively, and the number of plants increased to 14 in 1892. During the intervening years, the cement industry has experienced prosperity as well as depressions.

There are, at present, 15 cement companies with 36 plants, their total annual productive capacity, including those under construction, being a little more than 8 million tons. Exports of cement were as follows:—

1951 (Jan. to Dec.)	1,075,000 tons
1952 (Jan. to Dec.)	951,000
1953 (Jan. to June)	397,000

The Shimokita Cement Co., Ltd. is planning the construction of a plant of 11,200-ton monthly capacity, and the Toyo Soda Co., Ltd. a plant of 12,000-ton monthly capacity. In addition, it is expected that two or three other new plants will be built in the near future.

Waste heat is extensively utilized in cement factories. The required electric energy in cement factories amounts to 89 million kWh a month, of which about 80 per cent is generated by waste heat. Electric generating plants installed are as follows:—

	Total capacity
Hydro-electric power plant	720 kW
Coal burning power plants	8,000
Waste heat power plants	189,610
Total	198,330

The history of the Company dates back to the establishment of the Osaka Yogyo Company in 1888 by leading businessmen of Osaka. In 1917 the cement department was established by the Company, the business of which hitherto had been confined to the manufacture of fire bricks and tiles. In 1926 the Osaka Yogyo Cement was founded with a capital of Y2.5 million, separating from the parent Company, for the exclusive purpose of manufacturing cement. Its capital has been increased successively to meet expansion of its productive facilities, to the present Y550 million. Sustaining no damage to its equipment during World War

REPORT FROM MALAYA

The Malay Rulers met recently at the Istana of the Sultan of Selangor to consider the petition of the UMNO-MCA Alliance for an independent commission to investigate constitutional reforms. The Raja of Perlis presided and the State Premiers were also present. They look with disfavour on an outside commission, though some of the Rulers were ready to agree to a review of the Constitution by a local Commission. The question was whether they would agree to a commission composed of non-Malayans from overseas. The Alliance leaders would not agree to a local commission. At the following meeting with the High Commissioner the Rulers said No to any outside Commission, but this was by no means the only issue brought up in the conference, which also accepted the report of the Constituency Delineation Commission, dividing the Federation into 52 constituencies for national elections.

An interesting note was struck by the President of the Singapore branch of the Straits Chinese British Association (T. W. Ong), who assailed the suggestion of the head of the Malacca branch advocating that the Association should throw in their lot with "semi-alien organisations" like the UMNO-MCA Alliance. "For better or worse, those who were once proud of their British heritage are now looking elsewhere, and for that we have to thank the London Colonial Office and the clever makers of the new Constitution of the Federation. We in Singapore are grateful that we are still what we were before—that we have one simple loyalty and one undivided allegiance undiluted with any other motive or interest."

It was announced after the conference of the Malay Rulers and the High Commissioner of the Federation, at which the Rulers agreed to re-examine the Federation Agreement, that between then and the end of September the nine Malay Rulers and the Federation Government would go into the question of how best to review the Federation Constitution.

The Constitution will be amended. It creaks in several of its joints. When the Federal Legislature comes under the control of a political party it may prove to be in some respects unworkable. A commission from outside Malaya would have approached this question without any suspicion of bias—but also without any knowledge of the Malayan political scene. The Rendel Commission was possibly a model of its kind. Decision was in the hands of the Councillors appointed to represent the legislature, but they had a Chairman from the U.K. and the services of a Constitutional expert who took no part in the voting. There is much to be said for employing in the Malayan Federation a Constitutional expert from one of the Commonwealth countries with experience of Federal problems.

The functions and responsibility of the legislatures—Federal and State—require more precise definition. The Alliance has accepted the White Paper proposals and no-one has disputed the decisions against elected majorities in the State Councils. There seems to be agreement between UMNO and the MCA not to press for a further broadening, at this moment, of the basis of Federal citizenship. There can be no postponement of such questions as the relationship between the State Governments and the Federal Government in the light of elected legislatures, or the inability of the Federal Legislative Council, however large its elected element, to introduce legislation amending the Federal Agreement without the approval of the Rulers.

The present division of executive and legislative responsibility seems hardly conducive to the proper working of even a partly-elected legislature. There is possibility of friction between the High Commissioner and the Council over clauses which enable him to ignore the Councillors. There is greater chance still of friction in the relationship of the State Councils to the Federal Government, especially if a State Council were controlled by political opponents of the parties dominant in the Federal Legislative Council.

In the first State elections to be held in the Malayan Federation, the UMNO-MCA Alliance secured all 16 seats in the Johore State Council and showed that nothing except a completely re-vitalised Party Negara will have any hope of securing representation on the Federal Legislative Council when the elections are held to that body next year. The Alliance secured 64% of the votes cast, compared with 9.4% of the Party Negara. Over 85% of the voters went to the polls and it was an impressive sight as men and women in the Malay villages went to cast their votes for the first time in history. The five seats returned three Chinese, one Malay and one European.

The retiring Chairman of the Malacca Divisional Committee of the Malayan Trade Union Council (V. K. Menon) warned his fellow-trade unionists to steer clear of all politicians; otherwise the trade union movement would be caught in the cross-currents of political thought and founder. They must take an active and intelligent interest in politics but "our first thought must be the welfare of the common worker." The influence of the MTUC had waned, he said, because of clashes of political ideology among the unionists. Trade unionists should not let the MTUC be used as a vote-catching instrument by any political party in Malaya, but they should be in a position to guide any political party that comes into power to introduce legislation which will benefit the common man.

Another viewpoint was expressed by the Member for Education, Data Thuraisingham, who said in Kuala Lumpur

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II, the Company has become one of the leading manufacturers of cement in Japan.

Lines of Business: Manufacture and sale of various kinds of Portland cement (high early strength, normal, moderate heat, and silica cement). Stress is being laid on the manufacture of normal Portland cement.

Cement Plants

Name	Location
Osaka Plant:	Minami-Okajima, Taisho-ku, Osaka
Ibuki Plant:	Shunjo, Sakata-gun, Shiga Pref.

The Ibuki plant started operation in June 1952 and doubled its production capacity at the end of the same year. The Company now has an annual production capacity of 900,000 tons of cement, of which 300,000 tons is by the Ibuki plant.

"Lion Brand" Portland Cement, the product of the Company, enjoys a high reputation throughout the world; production is on a large scale and the quality is excellent. The Osaka Plant is located near the heart of the Osaka Port, one of the principal exporting centers in Japan, hence quick and economical overseas deliveries are assured. Since the termination of hostilities, the most up-to-date equipments and machinery have been installed. The Ibuki Plant, which is provided with the most modern installations, receives raw materials, of first grade quality, from Mount Ibuki by its own ropeway, a method which greatly reduces production costs. The products of the Company are of uniform quality, satisfying current standard specifications in Great Britain and the United States.

SHIPPING & AVIATION OF MALAYA & SINGAPORE

PORTS AND SHIPPING

Singapore

The Port of Singapore is the largest in South-East Asia. 41 major shipping lines use its services, linking it with every part of the world. In 1953, 53,255 merchant ships of a net tonnage of 46,233,529 entered and cleared the port. 10,880 were engaged in foreign going trade and 42,375 were ships under 75 tons and sailing craft. The largest merchant ship to enter the port was the "Pasteur" (French) of 30,447 tons gross and the deepest laden ship was the British tanker "Velutina" drawing 34' 6". The "Chusan" (24,215 tons) was the largest to be berthed alongside. 3,426 vessels are registered in Singapore, the largest being 8,555 tons gross. The working, building and repairing of ships provides employment for over 22,000 or 17% of the Colony's total workmen.

The nature of the Port was defined by Sir Stamford Raffles as follows: "The Port of Singapore is a free port and the trade thereof is open to ships and vessels of every nation free of duty, equally and alike to all."

Of the 6,587,247 tons of cargo handled in 1953, 4,161,040 or 63% was handled at the Harbour Board premises, including Telok Ayer Basin, and 2,426,207 or 37% was handled outside the Harbour Board premises mainly by ships in the roads.

The Singapore Harbour Board was established in 1915. The Members of the Board are appointed by the Governor and it consists of a Chairman, a Deputy Chairman, and Representatives of Government, and of the shipping and merchant communities. Its premises cover 700 acres, with 2½ miles wharves, and 40 acres of covered storage space. The total capital assets of $124 million are administered on a non-profit-making basis. Certain controls over the Board's working are exercised by the Government in matters affecting the community as a whole but the Board is responsible for the satisfactory administration and financial solvency of its undertaking. The Harbour Board increasingly provides mechanical aids for cargo handling, and this has greatly accelerated the turn-round of ships and reduced damage to cargo. Schemes are being developed for the further expansion of the Harbour Board area.

The Harbour Board has its own Police Force, which now numbers 288, to enforce its By-laws and to prevent pilfering. It works in close association with the Colony's Police Force.

Many firms are engaged in stevedoring and chandling.

Coal bunkering is carried out by the Malayan Coaling Agency. The principal oiling station is at the small island of Pulau Bukum and Pulau Sebarok. Oiling is also carried out by bunkering lighters in the roads. Watering is carried out by the Harbour Board at its wharves and in other parts of the ports is in the hands of W. Hammer and Co. Ltd.

For the year ending June, 1953, 3,698 vessels of a total net registered tonnage of 10,398,970 berthed at the Board's wharves. This is the largest tonnage in the history of the Board. During the same period the Board handled 5,357,049 tons of cargo; 2,901,583 Inward and 2,055,466 Outward. This is a slight recession from the figures for the previous year which was the highest on record for the Harbour Board.

Penang

The length of Swettenham Pier in Penang is 1,200 feet and it can accommodate two ocean-going ships. There is a wharf of 2,620 feet length at the Railway installation at Prai which can accommodate lighters, and ships drawing less than 12 feet. Godown space within the port area (which includes Butterworth, Prai and Permatang Pauh)) is about 600,000 sq. ft. of which 250,000 is on the island and the balance on the mainland.

Tonnage handled in the port during the year 1953 totalled 1,751,000 compared with 1,696,000 in 1952 and 1,704,000 in 1951. Of the 1953 total 1,067,000 was in ocean-going ships. Tankers discharged 212,000 tons of oil in bulk. Transhipment cargoes totalled 190,000 tons. Total imports of rice were 104,000 tons, cement 87,000 tons and sugar 50,000 tons. Exports included 180,000 tons of rubber, 43,000 tons of coconut oil and 41,000 tons of tin. The total value of trade of the port for 1953 was $1,081 million as against $1,441 million in 1952. Of the 1953 total $464 million was imports and $617 million exports.

Port Swettenham

Port Swettenham which is operated by Malayan Railway is the natural channel for the produce and the imported requirements of the central states of the peninsula, and has steadily become of more importance in the post-war years.

The wharf accommodation at Port Swettenham consists of a 2-berth "ocean" wharf 1,010 ft. long, a "coastal" wharf 600 ft. long, a "lighter" wharf 334 ft. long and 3 "platoon" wharves for the lightering of rubber each carrying a permanent conveyor for loading rubber direct from the ship to the lighter. Additional godown accommodation, both private and Railway-owned, was built during 1952. The Railway-owned accommodation totalled 277,229 sq. ft. whilst the privately-owned accommodation in use or under construction totalled 163,863 sq. ft. at the end of 1952. In addition a large area served by three gantry cranes was maintained as an open stacking area.

In 1953, 1,049,195 tons of cargo was handled. On the average, 99 ships of a total tonnage of 3,816 tons arrived and departed each month.

Other Ports

In 1953, Dungun (Trengganu) handled 1,156,340 tons of cargo: Telok Anson (Perak) 208,153: Malacca, 123,526 and Port Dickson (Negri Sembilan) 46,715.

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that the days of the leisurely scholar were over. "To-day the dynamic engineers and designers have taken over and classical literature and subjects of static value have receded in importance." If one wanted to see how technical the modern minds were one had to look at the toys favoured by the children. He also referred to the Government's plan to meet the demand for vocational education and appealed to the association to help in opening up wider fields of technical activities. The tendency towards technical education would raise a big problem for Malaya, he said. The Government service had room for only a limited number of technical assistants. Even women are beginning to invade the technical spheres.

SHIP-BUILDING AND REPAIR

The largest shipbuilding and repair organisation in the Colony is H.M. Dockyard at Seletar. This employs some 8,500 men. Of the Civilian undertakings, the Singapore Harbour Board's Dockyard is by far the largest and has very complete workshops. Continuing the trend of recent years, all dockyard facilities were extended and the necessity for additional dry dock accommodation was emphasized by demands for accommodation that could not be met. The largest of the Board's five graving docks can take ships up to 850 feet in length. The Board maintains five slip and launching ways and work was begun on a new fitting-out berth which is to comprise a 600-feet jetty with a travelling electric crane weighing 150 tons. This will be a new "Queen's Dock" which will cost $6 million and should be in commission by the end of 1955. The U.K. Government has given an interest-free loan of $1.75 million towards its cost.

23 private firms with 6 slip-ways capable of taking vessels of 100 to 500 gross tons and with many smaller slip-ways are engaged in building large craft and routine repairs and maintenance to over 1,000 launches and junks.

COASTAL SHIPPING

The principal fleets which at present maintain the Malayan coastal trades are those of the Straits Steamship Company and the Malayan Stevedoring and Transportation Company (the latter referred to for brevity as M.S.T.). The Straits Steamship Company, a public company founded in 1890, and brought under the management of Mansfield & Co., Ltd., in 1922, is the premier line, which, in addition to Malayan coastal services, also operates, in its own name or through subsidiaries, lines to Burma, Indonesia, Siam and Indochina, as well as to Sarawak and North Borneo.

The present Straits Steamship fleet consists of 54 vessels amounting to over 41,500 g.r.t. or 35,000 tons carrying capacity, of which only a part at any one time is employed on the Malayan coast.

The Malayan Stevedoring and Transportation Company is a post-war newcomer to Malaya, having started operations there in 1948. It is a private company, an off-shoot of the American-owned Luzon Stevedoring Corporation of Manila; after an experimental phase, it has become an accepted Malayan institution, not predominantly American-controlled. Its large fleet of lighters and tugs is used partly in harbour work, partly in coastal services, especially on the west coast of Malaya, and also between Malaya and Indonesia. The company now accepts little overseas business, but still carries coal to Malaya from Palembang.

AIR SERVICES

The site for Singapore's civil airport at Kallang, only 1¾ miles from the centre of the City, was selected in 1930. The airport site was a mangrove swamp with its southernmost boundaries adjoining the sea. Reclamation of the swamp land began in 1931 and less than six years afterwards, the Kallang Airport was declared open. The Terminal Building houses offices of the major airline companies and provides all passenger facilities. There was an enormous increase in passengers, aircraft and the amount of freight handled at Kallang Airport during the post-war period. In 1953, 62,391 passengers and 1,943,472 lbs. freight were set down; 61,590 passengers and 7,001,217 lbs. freight picked up and 16,396 passengers and 1,053,680 lbs. freight in transit.

Since the war the speed and the density of air traffic have increased to an extent that could not have been foreseen when Kallang was built. Air transport progress has necessitated the selection of a new site and additional modern facilities, that can no longer be met by any feasible modification of Kallang. The building of a new airport for Singapore at Paya Lebar began in September, 1952. This airport, 7½ miles from the City's centre, is estimated to cost a total sum of $37,000,000 (Straits) when completed. The U.K. Government is making a gift of $10,000,000 towards the cost. The runways and taxi-tracks are scheduled to be completed at the end of 1954, to enable trunk aircraft movements to be gradually transferred to Paya Lebar early in 1955. With its 8,000 feet runway, it will then be able to deal with all Singapore's air traffic for years to come.

AIRLINES

(i) Internal

Malayan Airways Limited operate frequent daily domestic flights to all important points in the Federation of Malaya using "Dakotas". The service has maintained an excellent record for safety and punctuality and is popular. Malayan Airways run a regular service four times weekly in each direction to Kuching and Sibu in Sarawak and Labuan, Jesselton and Sandakan in North Borneo; also once weekly as far as Jesselton only and once weekly to Kuching and Sibu. The airline also runs regular services from Singapore to Medan via Penang, Bangkok via Penang, Saigon via Kota Bahru and Palembang direct.

An internal feeder service is operated in North Borneo, using "D.H. Rapide" aircraft and connecting with the main "DC 3" services. The points served are Sandakan, Kudat, Tawau, Jesselton, Ranau, Labuan.

There is another internal air service known as the Federation Air Service, operated with "Beaver" aircraft on behalf of the Federation Government by Malayan Airways. This provides a link with a number of smaller centres in the Federation which could not otherwise be reached by air, and is intended primarily for the use of Government officials on official business but can also be utilised by the public when seats are available. The Federation Air Service covers Bentong, Benta, Kuantan and Temerloh in Pahang, Jonderata (for Telok Anson) in Perak, Dungun in Trengganu, Kota Bahru, Ulu Bernan, Bidor, Sitiawan, Ipoh, Labu Kubong.

(ii) Overseas

Eight Overseas Airlines operating in and out of Singaport are as follows:— British Overseas Airways Corporation, Qantas Empire Airways, K.L.M.—Royal Dutch Airlines, Garuda Indonesian Airways, Cathay Pacific Airways, Indian Airline Corporation, Pan American World Airways, Union of Burma Airways.

(Continued from Page 652)

move upward without being arrested at certain limits. But, apart from this basic truth there is another element making the share market in New York jittery, namely the advent of the elections which are to take place on November 2. At that time 335 congressional representatives will be elected, and 32 senators; besides, numerous assemblymen and state senators, as well as state governors. The problem is now who will control Congress? A win for the democrats would produce more psychological than material effects. People regard the democrats generally as unsympathetic to big business. The democrats are known as an 'inflation' party. Preliminary estimates point to a small majority of democrats in Congress. If this expectation is realized, the change might have unfavorable results in connection with the stock market.

ECONOMIC SURVEY OF THAILAND

Agricultural production in Thailand, which accounts for about 60 per cent of the national income, recovered rapidly after the war, cereal production exceeded the pre-war level already in 1946/47, and agricultural production as a whole reached 147 per cent of the 1934-38 level in 1951/52. Industry is limited to the processing of primary products for export, and some production for local consumption. There are indications of substantial increases in investment, both by the government and by private interests. The world shortage of rice and consequent high prices were the main reason for the continuous expansion of exports, which reached a peak in 1951, when rubber and tin prices were also unusually high. Since the price of rice continued upward in 1952, Thailand was not seriously affected by the decline in rubber and tin prices. It was only in 1953, with the start of a decline in the rice markets, that problems of readjustment became serious. After encouraging imports during the boom period (for instance through an appreciation of the currency), the government allowed the foreign exchange market to find its own equilibrium, but with the deterioration of the situation toward the end of 1953, it resorted to quantitative import restrictions.

PRODUCTION AND DEVELOPMENT

Agriculture: Rice, the most important crop, is cultivated on over 90 per cent of the farmland, and accounts for more than one fifth of the national income and about one half of exports. The rising export prices of rice, due to the general shortage in South-East Asia, have not been fully reflected in the domestic price, which was largely insulated by the government rice export monopoly. The internal price has however risen steadily though more moderately and has provided some incentive to the producers.

There was little war damage and production tended to increase in the post-war years though the extent of increase over pre-war level cannot be gauged accurately owing to under-estimation of pre-war crops. In 1951/52 a bumper crop was harvested but in 1952/53 output fell by 10 per cent as slight drought followed by floods in several western and west central provinces reduced the harvest area by more than 10 per cent and the unseasonable rain- some central provinces damaged the paddy stocked in the open to dry.

There has been no appreciable increase in yield per unit of land, but an agricultural development programme is under way aiming at higher yields especially by improvement and extension of irrigation and most important of all, the rice breeding programme for improved seeds.

A major irrigation project under way at Chainat, that will provide regular water supply to an area of 1 million hectares, should increase rice output by 800,000 tons. The cost of imported equipment is financed by a loan of $18 million from the International Bank, and the progress of the work to date allows the hope that it will be completed in 1958 as scheduled.

Research is also being carried out to find the optimum fertilizer combinations for various soils and to improve rice seeds by selection and cross breeding. In the next four years, chemical fertilizers will be purchased to be distributed at cost over an area of about 54,000 hectares of paddy. The response to this experiment may however depend on the relative prices of paddy and fertilizers.

Owing to the dangers of excessive reliance on a single crop, the government is encouraging crop diversification and animal husbandry, particularly production of previously imported items such as jute, cotton and sugar.

Rubber, with a total planted area of approximately 600,000 acres, is grown chiefly for export in small holdings in the southern provinces. Production and export exceeded the pre-war level, even in the early post-war years, and reached a record high during the 1950-51 boom but have since declined. The recent fall in rubber prices and the drop in earnings of tappers who work on a share basis on larger holdings have caused hardships in the rubber growing areas, and the government is taking steps to assist rubber producers by improvement in the techniques of production, processing and grading.

Teak and yang are the two principal timber products in Thailand. At present, the government supervises some 125,000 square kilometres of teak forests,[1] which are under regular exploitation, with due attention to reforestation. Teak felling has steadily increased since the end of the war. The amount of teak extracted in 1950 (245,000 cubic metres) was about 3 times the average annual extraction during 1945-48. Teak production for 1951 was estimated at 258,651 cubic metres. Output figures for 1952 and 1953 are not available. Extraction of yang, an important construction timber, and of other logs decreased moderately in 1952 as compared with 1951.

Mining: Tin, wolfram, antimony and lead are the four relatively imported minerals. Much of the tin-mining equipment was damaged or allowed to deteriorate during the war and in 1947; production was less than one tenth of the pre-war peak. Starting in 1948 tin production began to improve considerably and reached the post-war peak in 1950 with an output or 14.6 thousand tons. Since then, output has fallen together with world prices. The appreciation of the free-market baht early in 1952 also was a severe blow which hit small mines hardest and a number of them closed down. Many larger mines were operating at a loss because, if they closed, the reopening cost would exceed the operating loss. Total output of all tin mines declined substantially during the first three quarters of 1952. In September, foreign exchange which tin exporters had to surrender to the Bank of Thailand at the official rate was reduced from 40 per cent to 20 per cent of export proceeds, and this change restored a great part of the fall in earnings which had resulted from the currency appreciation. As a result, the output of tin increased substantially during the last quarter of 1952 and remained at a comparatively high level during the first half of 1953. In the summer of 1953 tin prices fell again after a period of relative stability. In the long run, production of existing mines is expected to decline as the exhaustion of a significant number of ore beds is predicted in the next ten years. A number of mines have already passed their optimum working age and are operating at considerably increased cost. Foreign mining interests have, according to available information, made no new investment since 1952. To help the tin industry, the government is considering a halving of the royalty rate.

Production of wolfram and lead followed a trend similar to tin, and wolfram producers are also reported to be in a difficult position.

1. It has been estimated that 63 per cent or approximately 324,300 square kilometres of the total land area is under forest cover.

Transport: The railway system which operated 3,272 kilometres before the war was badly dislocated by wartime bombing. Post-war rehabilitation progressed steadily with the assistance of a $3 million loan from the International Bank and United States Aid. Almost two thirds of the loan is being spent to re-equip the railway workshops at Makkasan, Bangkok, and the rest for signalling equipment. After considerable initial delays, construction is now going forward satisfactorily, and the workshops are likely to be completed in 1954. The signalling equipment is arriving and some has already been installed. In 1952, three major bridges destroyed during the war were replaced, and railway operation approached pre-war level, carrying 68 million ton-kilometres of freight in March 1953 against a monthly average of 25 million in 1948.

Highways so far have been used chiefly as feeders to the railway and river systems. However, the government is undertaking to construct in the next few years a system of trunk roads with a total length of nearly 5,500 kilometres and of provincial roads with a total length of 8,700 kilometres. This programme, for which a loan has been under discussion with the International Bank, would increase more than three fold the existing road mileage. It is reported that 600 kilometres of new highways are to be opened to traffic in 1953, as compared with 300 kilometres opened in 1952 and 233 kilometres in 1951.

The waterways which connect four rivers by a system of artificial canals are the most important means of inland transport carrying more than three fourths of the country's freight traffic. The number of licensed river craft has been reduced since pre-war, but the size of boats and the number of those operated by motors have increased.[2]

The development of the Bangkok port has been financed by an International Bank loan of $4.4 million. The greater part of the loan is being used to finance the foreign exchange cost of dredging a canal through the sand bar at the mouth of the Chao Phya river, to enable larger vessels to enter the port of Bangkok. The rest is being used to finance cargo-handling equipment at the port terminal, and navigation aid in port waters. The project should increase the port capacity and reduce cargo handling costs by the elimination of lighterage and transhipment charges. The dredging work which has been delayed, may be completed in 1954.

Fuel and power: The rapid increase in demand for electricity in the Bangkok area has resulted in overloading the generating facilities. New generators are being installed, and the situation had substantially improved by the end of 1953. A new power station with a capacity of 20,000 kw is proposed for Bangkok and Thonburi; it would take three years to build at a cost of 25 million baht. Surveys are being made of possible locations for hydro-electric projects in the northern part of the country.[3]

Wood is at present the main fuel, but cannot meet the expanding requirements of the economy. Lignite deposits are known to exist but their development is yet to be completed. Petroleum is known to exist in the province of Chiengmai, but the extent of resources is still to be determined.

Industry: Industrial development, which is so far limited in scope, has been handicapped by the lack of fuel, power and technical personnel. The government which has established and operated a number of factories is at present stressing the investment in power and transport. Until considerable improvement in the power supply results from the hydro-electric projects, no great strides in industry can be expected.

Cement production expanded rapidly in response to the high post-war level of demand, and an extension of the present capacity of 20,000 tons a month is planned. The establishment of another cement factory to supply the construction requirements of the Irrigation Department is being considered.

The establishment of a steel mill is under study by the government and by a number of Japanese companies who are also interested in developing the high grade iron ore deposits which have been found in the western part of the country.

The one cotton mill in Bangkok, with 21,000 spindles which supplied over half the requirements of the handloom industry, proved incapable, in the absence of import duties on yarn, of withstanding competition from imports after the appreciation of the baht in 1952. The mill was declared bankrupt in the middle of 1953 and is at present being reorganized.

A glass factory, which started operating at the beginning of 1953 with Australian capital, is now producing one million bottles a month. The government has raised import duties on bottles to offset the duties that had to be paid on imported raw materials.

The government is building an additional factory to manufacture gunny bags. When it is completed, domestic output should reach some 15 million bags a year, enough to cover three quarters of the country's requirements.

There are several other factories producing soap and other consumer goods, and the government is also running factories manufacturing paper, sugar, alcohol, and rubber goods. Plans have been made for the erection of more plants, particularly for chemicals, with the expected participation of foreign capital and technical experience.

While government investment has greatly expanded, there are at present no announced priorities in the allocation of funds. Projects are prepared by the ministries or departments and then submitted to the Cabinet. Even Cabinet approval does not mean however that the project is immediately put into operation, since this depends on the availability of funds. Projects can thus remain on paper until they are incorporated in the government budget. In 1952, the government has set up a planning committee to study existing projects and to recommend investment priorities.

EXTERNAL TRADE AND PAYMENTS

Despite continuous increases in the value of imports, the balance on account of goods and services showed sizable surpluses between 1947 and 1951, mainly because of the persistent rise in both the price and the quantity of rice exports. During 1950/51 the high prices of rubber and tin also contributed to the increase in foreign exchange earnings. The surplus, however, turned in 1952 into a deficit which grew larger in the first half of 1953. While imports continued to increase during this period, export earnings fell, owing chiefly to the falling prices of rubber and tin and the decline in minor exports due to the appreciation of the free-market rate of the baht. In addition, there were large non-monetary gold imports which in 1952 apparently more than offset the trade surplus and in the first half of 1953 were far larger than the deficit on merchandise account. The increase in the deficit on services was also notable in the first half of 1953.

The Bank of Thailand used some of the liquid foreign assets which were accumulating in 1951 to purchase $66.4 million of International Bank sterling bonds. It appears

2. Licensed river craft in 1950 totalled 34,263, as compared with 72,000 licensed in 1939. Of the traffic craft, 3,511 are motor-driven against only 2,000 in 1939.

3. There is also widespread although small-scale electricity generation in other municipalities and by private concerns.

that a large part of these bonds had been sold in 1952 since the Bank's liquid foreign assets increased in spite of a deficit on current account. In the first half of 1953, foreign reserves showed, for the first time since 1948, a small decline.

Exports and export control: Rice is the major export commodity which accounted for about one half of the total export earnings in the post-war period; it is followed by rubber, tin and teak in that order. Almost all foreign exchange earnings from rice exports and a minor part of those from rubber and tin exports must be surrendered to the Bank of Thailand at the official exchange rate. Other exchange earnings can be sold on the free market.

In 1952 and 1953, approximately two thirds of rice exports were sold under government-to-government contracts, and the rest exported privately, usually at substantially higher prices. The government has succeeded in isolating the domestic price from fluctuations in export prices by keeping its internal procurement price steady and by a rigorous system of export control over private trade. In order to obtain a licence to export 1 ton of rice, millers must sell 5 tons to the government at a price that has remained unchanged since 1948 and at times could not cover the miller's costs. The proportion of permitted exports (so-called "inducement rice") to deliveries to the government has varied from time to time and is so calculated that the profits on the one are largely offset by the losses on the other.

Besides, the government also sells export licences to approved dealers (so-called "free quota rice") for a premium that is calculated on the basis of the difference between the domestic and the foreign free market price. The government sells to the Bank of Thailand at the official rate of exchange its export earnings and private traders must turn in an equivalent amount of foreign currency per ton exported. If they succeed in obtaining a higher price the remainder can be sold on the free market. Because of these quantitative controls and these various types of export duties, traders and millers have no incentive to bid up the domestic price.

Favoured by strong foreign demand and high export prices, rice exports followed the rising trend of production until 1951, but in 1952 they fell by 9 per cent, in spite of the fact that the 1951/52 crop was 10 per cent higher than the previous year's. The government decided early in 1952 to limit exports. Export quotas were reduced, and export prices were raised by about 7 per cent for government contracts. Free market export prices which were already higher rose even more. In the last quarter of 1952, export quotas were announced rather late and prices went up again, by about 11 per cent in the case of government rice.

Buyer's resistance to the high prices became evident in 1952/53, supported by a world-wide increase in rice production and the continuing shift in consumption from rice to other grains. Thus early in 1953 although the government deferred the conclusion of export contracts, there was no rush to buy free market rice. Exports of "free quota" rice were further discouraged by the increase in the premium payable by private exporters from $20 to $30 per ton, and by the increase from 4.5 to 5 tons in required sales to the government for each ton of "inducement rice" exported. Private exporters therefore found it more difficult to make price concessions in foreign markets where competition between sellers was gradually becoming keener. The large crop and reduced exports in 1952 resulted in a big carry-over.

While Ceylon and the Philippines were not buying any rice in 1953, India and Indonesia, which had been important customers in 1951 and 1952, reduced their purchases to a very small amount. Hongkong, Japan and some other countries imported more Thai rice in 1953 than in 1952. Total rice exports in 1953, at 1,340 thousand tons, were about 6 per cent below that in 1952. At the end of October, the government lowered its contract price (the so-called "f.o.b. charges" were reduced from $20 to $14), while prices of "free" export rice were falling on the international markets.

EXPORTS OF PRINCIPAL COMMODITIES

Quantity: Thousand tons
Value: Million dollars

	RICE		RUBBER		TIN	
	Quantity	Value	Quantity	Value	Quantity	Value
1951						
Jan.-June	799	98.2	54.9	58.8	6.2	12.2
July-Dec.	778	100.0	54.9	45.0	6.3	10.5
1952						
Jan.-June	735	104.6	48.9	29.3	5.8	9.3
July-Dec.	690	105.6	50.6	24.8	7.2	12.1
1953						
Jan.-June	720	113.5	48.9	21.9	6.9	11.1
July-Oct.	401	62.9	31.6	11.7	4.3	5.3
July-Dec.	620	98.2	—	—	—	—

In 1954, the Thai government announced that it was prepared to lower its export price. Internal prices had already declined owing to the accumulation of stocks.

Export earnings from rubber fell by half in 1952 as compared with 1951 and by one-third in 1953 as compared with 1952, owing chiefly to the considerable fall in prices. The Thai-United States rubber purchase agreement lapsed at the end of 1952 and was not renewed. While it had routed all Thai rubber exports to the United States market, it did nothing to support the price. Under the terms of a one-year agreement concluded in September 1953, Japan agreed to buy Thai rubber to a total value of $1 million. The appreciation of the free market baht early in 1952 and the requirement to surrender to the Bank of Thailand 20 per cent of the exchange earned on rubber exports at official rates affected the competitive position of Thai rubber on the world market, in a period of falling prices.

RICE EXPORTS

Thousand tons

To	1950	1951	1952	1953
India	88	230	176	4
Indonesia	90	180	220	49
Philippines	6	109	31	—
Ceylon	30	—	16	—
Malaya	467	406	377	377
Hongkong	191	115	172	235
Japan	318	336	306	476
Korea	—	40	47	99
Other countries	299	161	80	100
Total exports	1,489	1,577	1,425	1,340
Total production of paddy	6,684	6,782	7,325	6,602

Tin exports rose in the second half of 1952 and the first quarter of 1953, because of higher profits following the reduction in the proportion of exchange earnings that had to be surrendered to the Bank of Thailand at official rates. Exports fell in response to the April 1953 fall in tin prices: in May they were only 883 tons as compared with 1,417 tons in March. They have risen again since June.

Exports of timber had risen up to 1951 when the high price of teak diverted foreign demand to substitutes, while exports of other types were banned in order to conserve supplies for the home market. Owing to the deterioration of the balance of payments position, this ban has been lifted since July 1953.[4]

Imports and import policy: Up to November 1953, Thailand had made very limited use of quantitative import restrictions, but had relied on multiple exchange rates. The official rate of 35 baht to the pound applies to the bulk

4. No data have been available since 1950 on other commodity exports, because of the reorganization still in progress of customs statistics.

of exports—rice and part of the proceedings from tin and rubber, while it is used only for a very limited range of imports, mostly government procurement. The Bank of Thailand sold part of its excess foreign exchange receipts to the commercial banks at the rate of 45 baht to the pound for the purchase of a wide range of permitted imports. Exchange for other imports and for invisible payments had to be obtained from the free market which is fed by part of the rubber and tin exports, as well as by those from other minor exports. The Bank of Thailand has on occasion intervened in the free market by selling additional supplies of exchange to the banks. The Bank can also affect the demand for exchange on the free market by changing the list of commodities for which it is prepared to supply sterling at the rate of 45 baht.

The value of imports has increased continuously since 1948 as a result of the expansion in money income arising from the export boom and the considerable rise in government expenditure. In 1952 and 1953, although export proceeds declined, the great increase in government expenditure and in the budget deficit helped to sustain import demand. In order to lower the cost of living, the government instructed the Bank of Thailand in February 1952 to reduce its selling rate of sterling from 51 baht to 45 baht per pound, an appreciation of 13 1/3 per cent. As a result, large imports were financed by sterling which the Bank of Thailand had to supply to the free market to support its new rate.

The commercial banks' selling rates showed a smaller appreciation and the Bank of Thailand imposed exchange control on capital movements and outward remittances.[5] The commercial banks' rates came close to the Bank's rate in July and remained stable up to February 1953, owing possibly to large Bank sales of sterling to the commercial banks.

Gold imports when permitted by the Ministry of Finance are also financed by foreign exchange available in the free market. Before November 1952, no permits were given. Since then, the sole right to import gold was given to a newly organized financial syndicate,[6] which was importing a monthly average of $3 million of gold in the first half of 1953.

In view of the recent adverse change in the balance of payments and the declining government revenue, a bill raising import duties on many non-essential goods (including pianos, gramophones, records, automobiles, liquors, refrigerators, etc.) was passed in September 1953.

The foreign exchange supply deteriorated in 1953 with the fall in the value of exports. In March the Bank started to reduce the number of commodities for which it was prepared to sell sterling exchange, and the free rate of the baht fell as a consequence. Political fears caused by the brief invasion of Laos in May caused a further depreciation. As the sterling reserves of the Bank declined, new commodities were struck off the list of imports financed at the Bank rate. Increased demand and falling supply on the free market caused a continued fall in the baht rate to 57 baht to the pound in October. The fall in the value of the currency was arrested by imposing import controls over a wide variety of goods in November. Despite the immediate rise in the value of the currency which followed, this measure missed its declared purpose of bringing down the cost of living, since scarcities, real or anticipated, drove up substantially the prices of most imported commodities.

5. Since May 1952 exporters have been required to sell to or deposit their foreign exchange proceeds with authorized banks or exchange dealers. Since March 1952 remittances for family maintenance abroad and expenses for foreign travelling are limited. Any excess requirement and capital transactions have to be approved by the Bank of Thailand.

6. The syndicate, with 12 leading banks as its shareholders, sells gold to some large gold companies for resale to local gold shops. It was explained that while the smuggled imports of gold would be difficult to prevent, permission of legal imports would raise revenue for the government from the special fees charged and supply the people with better quality gold at reasonable prices. It seems that the government has no intention to discourage gold hoarding. Some of the gold may however be re-exported.

PUBLIC FINANCE & MONETARY POLICY

The two most important factors affecting the monetary situation have been the balance of payments and the government budget. Considerable caution is however necessary in interpreting the monetary impact of the balance of payments surpluses. Owing to government export of rice and to the multiple exchange rate system, a substantial part of export earnings accrue to the government Rice Bureau (arising from the difference between the government domestic procurement price and its export price), while the exchange profits of the Bank of Thailand, arising from the difference between the buying rate of 35 baht to the pound and the selling rate of 45 baht, lessen the amount of currency created by an export surplus. These arrangements meant that farm incomes remained fairly stable throughout the export boom and that foreign trade had a deflationary bias since each dollar of imports absorbed more currency than was created by a dollar of exports.

The boom of 1950-51 brought about a re-emergence of inflation. Despite the rapid rise in government revenue, expenditure rose faster and the 1949 surplus was turned into a deficit of widening magnitude. The rapid rise in expenditure was due to increased outlays on defence, higher pay to the civil service as the cost of living increased, and a particularly rapid growth in capital expenditure, which has been accounting for an increased share of both total expenditure and national income.

In addition, the large balance of payments surplus was offset to a small degree only by the Bank's exchange profits. The result of these forces can be measured in the rapid rate of currency expansion in 1950 and 1951.

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MONETARY EXPANSION AND CONTRACTION

Million baht

	1949	1950	1951	1952	1953 First half
Balance of payments on current account*	523	756	728	—223	—440
Exchange profits†	340	259	181	583	287
Increase in loans and advances of commercial banks	—	33	132	124	252‡
Government accounts	29	—125	—713	—761	—748§
Increase in money supply	226	860	940	25	342
Total money supply (end of the period)**	3,107	3,967	4,907	4,932	5,274

* Goods, services non-monetary gold and private donations. Dollar figures converted at the official rate of exchange.

† Estimated on basis of "Other deposits" in the Bank of Thailand's returns.

‡ First five months.

§ Balance of actual revenue and half of estimated budget expenditure.

** Including notes in circulation and demand deposits of commercial banks.

The threat of inflation was increased in 1952 by the sizable government deficit, the continuous rise in the export price of rice which caused the domestic wholesale price to rise by 12 per cent in the year, and the bumper rice crop which resulted in a great expansion in money incomes.

Currency appreciation was carried out in February 1952 in order to counter these dangers. The volume of imports rose steeply as a consequence, while exports were discouraged and the balance of payments turned into a deficit which, together with the increase in exchange profits of the Bank, offset the effect of the government deficit: currency circulation remained almost unchanged. Domestic prices of imported goods fell by nearly 23 per cent between the second half of 1951 and of 1952, without however much effect on the cost of living of the working classes of which imports are but a small component.

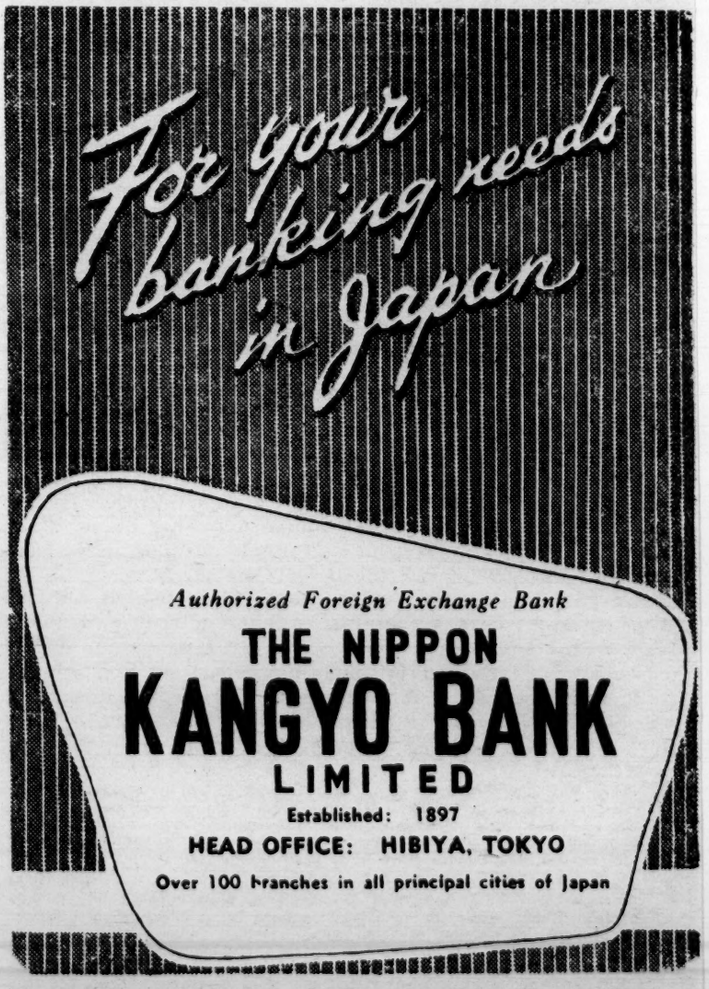
Government revenue increased again in 1953 largely as a result of the introduction of a few new taxes and of increases in tax rates which affected business taxes, import duties, purchase taxes and alien registration fee. The budget deficit was however larger than the actual deficit of 1952. The government has received large-scale borrowing powers to finance capital outlay and has borrowed from the Bank both foreign exchange and the Bank's exchange profits.

While the balance of payments deficit of 1952 had been the result of deliberate government policy, and was easily met from the reserves of the Bank, even the small deficit for the first half of 1953 created difficulties for the Bank, because of its desire to keep the currency issue backed by a high ratio of foreign exchange holdings. While the rise in money supply might have been responsible as much as the foreign trade deficit for the stringency in exchange availability, the Bank found itself incapable of backing the government policy of lowering the cost of living through appreciation of the currency, as had been done early in 1952. It proved necessary to impose import restrictions in November in order to sustain the higher rate desired by the government, since the Bank was unwilling to finance the higher rate of imports that would otherwise have resulted from cheaper import prices.

CONCLUSION

Thanks to its favoured export position and to the monetary policy of the Bank, the Thai economy experienced in the last few years both a rapid rate of growth and a great measure of stability. Problems of adjusting the economy to a lower level of export prices had barely made their appearance by the end of 1953. Difficulties might however occur in 1954 if export prices were to decline substantially, as the government accounts are already in deficit despite the current high level of revenue. The government may have to choose between decreasing its rate of investment and other measures of budgetary economy, steps to promote exports and discourage imports may prove necessary as well.

So far this year the economic situation of Thailand has been favourable and the country enjoys stability and prosperity. All pessimistic and otherwise uninformed predictions were proved wrong. The Thai people and their strong government have every reason to be satisfied with actual results achieved and can look into the future with confidence.



INDUSTRIAL ADVANCE OF HONGKONG

By a Chinese Manufacturer

The change of Hongkong from entrepot to manufacturing centre in East Asia has recently been noticed and as the China embargo remains in force the trend to improve and expand industry here is steadily growing. Quality of products has been improving but there are many manufacturers here who are doing damage to the general export interests of Hongkong by forging trade marks, using spurious materials and resorting to all kind of underhand practices. Government control over industry here virtually does not exist. For the progress of manufacturing in this place, some measure of official control, supervision and inspection is necessary. Prices are relatively cheap but Japanese competition, and lately Chinese competition, is ever more impressive and may lead in certain branches of industry to curtailment of markets. Japan is forging ahead which is all to the good of that enterprising nation but arouses fears among the less able and industrious competitors. Peking export drives are disturbing; the communist authorities, in their eagerness to earn exchange to import industrial equipment, have already resorted to dumping (i.e. selling of goods below production cost) and they will continue with this practice. As long as Imperial Preference exists local manufactures will have assured markets; but the time for free competition is approaching and then only quality and price will determine success or failure.

At present local manufactures are comprising from 20 to 30% of total merchandise exports of HK. This is a remarkably high figure. There are now some 3000 factories and workshops employing around 300,000 persons, and the number of factories is growing. The trade recession is, lately, the cause of the increase in interest by financiers in the establishment of factories (just as is the case in building construction).

Industrialization of Hongkong started early. During the first world war a shortage of daily necessities had prompted the authorities to encourage local merchants to manufacture goods for local consumption. The chief impetus to the industry was the introduction of Imperial Preference in the late 'thirties. Real expansion came along during the first few years after the second world war when local factories received large orders from abroad for all kinds of war equipment. The momentum, unfortunately, was intercepted by the Pacific War and Japanese occupation of Hongkong. One particular feature about Hongkong's post-war industrial development is its speedy rehabilitation. Within less than a year after liberation, many light industries resumed full-capacity operations, despite there being war damages, high cost of fuel and labour and a shortage of raw materials. Soaps and textile products were the first to appear on the market for both local consumption and export. Intensified activity was spurred by the very high prices for consumer goods in the countries in the Far East and the absence of competition. Starting from the second half of 1946, many new industrial establishments were registered month after month. By April 1948, there was a total of 1,014 registered factories with 50,000 workers while a number of unregistered ones engaged 10,000 more. The types of products increased to 100, the leading kinds were textile products, metal ware, rubber goods, torch, printing etc. The Colony's production capacity for heavy and light industries approached, by the end of 1947, almost 50% of its prewar level.

During the time when Hongkong was rehabilitating, other countries in the East were also recuperating. In 1947, Japanese cotton piece goods once again overflew the markets in the Far East. Their better quality, newer designs and cheaper prices in no time outdistanced Hongkong products and caused a severe curtailment in the demand for Hongkong products. Whereas all Hongkong manufacturers had been accustomed to working in a seller's market, they soon found themselves handicapped by their antiquated equipment, high cost of labour and raw materials and above all, their lack of technological knowledge and experience. Many were forced to close down. Those left behind and being better equipped began to realize the importance of up-to-date machinery for cost reduction and started to overhaul their production systems. It was at that time while Hongkong was in a depression that a large number of industrialists from Shanghai and North China came to Hongkong. Impressed by Hongkong's good geographical position, very liberal trade regulations, economic and political stability and Imperial Preference arrangements, they began to invest in Hongkong's industries. Besides capital, which was estimated at $148 M., they brought along latest types of machinery, technical knowledge, technological experience and a nucleus of skilled workers, all of which happened to be the missing ingredients for Hongkong's industrialisation. Modern fac-

(Continued on Page 672)

To SINGAPORE

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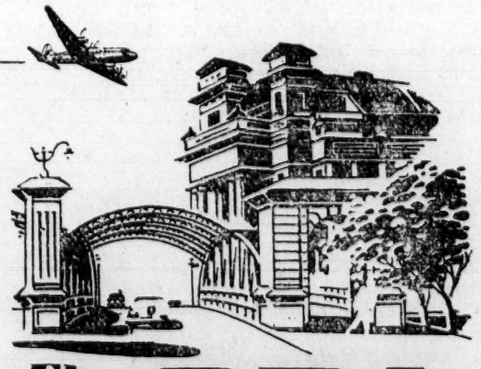
SAIGON, HAIPHONG, MANILA,
JESSELTON, SANDAKAN, LABUAN.



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FINANCE & COMMERCE

CHINA PRODUCE

BRISTLES

Bristles are a by-product of pig-raising in the vast Chinese countryside. The production reaches 19 million pounds a year. There are four varieties of bristles: black, white, yellow and multi-coloured. The black variety is the most common in China, constituting 80% of the total output. It is chiefly used for the manufacture of machine and household brushes. Next comes the white variety which is produced in Central-South and Southwest China and which constitutes 12% of China's total output. After they are bleached, white bristles are suitable for making clothes, paint and make-up brushes as well as brushes for medical purposes. The yellow variety is also called wild-hog bristle and is coarse and stiff. The multi-coloured variety is the one which has black, white and yellow colours in one piece.

Chinese bristles are known for their strength and pliancy. They are principally used for the manufacture of machine and painters' brushes. As a machine turns at high speed, only bristles can withstand violent friction and high heat. With fibres that are scaly and fine, bristles penetrates into the smallest apertures and clean out all the grease and dust.

Painters' brushes require longer bristles and of a none-too-stiff nature. Bristles are naturally divided at tips, being capable of absorbing paint in large quantities and of emitting it little by little so as to enable the painter to brush wider strips at one stroke. Possessing a strong oil-resisting capacity, bristles are not corroded by paint or varnish, and are durable. Aside from their use for painters' brushes, bristles can also be made into oil-cylinder brushes, and gun brushes. Stiff bristles produced in Chungking and in the Northeast and soft bristles produced in Central-South and East China form the bulk of Chinese exports. Bristles are used in the manufacture of woollen serge fabrics, doeskin, woollen carpets, etc. They are also used for making sutures. Long and stiff bristles are used by shoemakers. Bristles of short length, together with pig's hair and paper pulp, when mixed with mud, increase the cohesiveness of mud. Therefore they are used in architecture as a material to strengthen foundations. Short bristles are also used for cushions and mattresses. Even the waste undergrowth resulting from the process of sorting bristles can be used as fertilizer.

For export purposes bristles are sorted into different lengths. There are three kinds of bristles, determined by the degree of processing before they are exported: the thoroughly processed (i.e., bristles up to the required export standards), the semi-processed (i.e., those which have undergone only the preliminary process of sorting and preparation), and the raw cargo (i.e., those which have not been processed). When bristles have been sorted into bundles of different lengths, every bundle is given a name according to the percentage of bristles that conform to the specific length of the bundle, viz. 40 fen, 70 fen. . . . (For instance, if 80 per cent of the bristles in a bundle are six inches in length, then the bundle is labelled "six inches, 80 fen"). Shanghai and Hankow bristles are generally packed in 40-fen and 70-fen bundles respectively, Tientsin in 80-fen and Chungking in 90-fen bundles. At present, for commercial purposes, export bristles are called after the various producing centres: Northeast bristles, Tientsin bristles, Shanghai bristles, Tsingtao bristles, Hankow bristles, Chungking bristles, etc.

Bundles of different lengths are usually packed together for export, according to a certain prescribed ratio. But this practice varies slightly in different ports. In Shanghai, Hankow and Chungking, bristles differing by 1/4 inch in length are classified as of the same grade, and bundles of different grades are packed together, according to a fixed ratio, in cases of 133.33 lb. net. In Tientsin and the Northeast, bristles of same length are packed in cases of 110 lb. net, and the cargo is exported in "sets" of 55 cases containing bristles of different lengths according to a fixed ratio.

During the past two years China exported very little bristles to Hongkong. There were several enquiries from Europe recently and local exporters quoted 20s per lb c & f London for Hankow 2¾" white, natural colour; 17s 6d for 2½" and 12s for 2¼". Szechuen white, 5" to 5½" reached 74s 6d per lb c & f London.

COAL

China has vast coal reserves. Large-scale prospecting work in recent years has resulted in the discovery of many new rich coalfields. During the past four years China's coal mines have become mechanized to a considerable degree. According to estimates made in November 1953, 85.6% of the working face and 66.3% of the underground transportation facilities are mechanized. Ventilation facilities in 92% of the shafts have been mechanized. Taking the output of 1949 as 100, the production was 132 in 1950, 164 in 1951, and 202 in 1952.

China produces chiefly bituminous coal. It is highly combustible and its flame is tall, even and durable. As it contains comparatively little sulphur, it is excellent for coking and for steam engines in factories, power plants, locomotives and ships. The coal produced in Tatung Colliery of Shansi Province is called upper Jurassic coal. It contains very little sulphur and ashes. Tatung slack is good for blast furnaces.

The following are the specifications of Chinese coal for export:

	Moisture	Ash	Fixed carbon	Calories	Sulphur	Volatile	Size
Tatung lump coal	3-5%	7%	58-64%	7,500	1%	27-31%	2-inch mesh, scraps caused during transportation less than 10%
Tatung coal of mixed size	3-5%	9%	56-63%	7,050	1.3%	27-31%	Those of 10-mm. mesh constitute 30-40%.
Kailuan washed slack	—	20%	over 52%	6,500	1.1%	below 28%	

Before the enforcement of the Embargo, Japan was one of the big customers for China. During the past two years several direct shipments were made to Japan in exchange for Japan exports on barter basis but the volume was inconspicuous when compared with the previous record.

SINGAPORE SHARE MARKET

Notable features of the week were the rise of Rubber to over 80 cents a pound and the inherent strength of the Industrial market. Notwithstanding an overall loss of $3.00 a picul in the metal price, many Tin shares were on the up-grade and exchanges more numerous, but the much higher volume of business written was due to the turnover in Industrials.

Activity in Industrials covered a wide spread. Wearnes remained popular at last week's level of $2.75 as also Singa-

pore Cold Storage at $1.70. Malayan Breweries showed a further improvement with business up to $3.82½ and Wm. Jacks reached $3.15. Strong demand lifted Metal Box to $1.40. Straits Traders varied between $24 and $24¼, Straits Times had buyers at $3.10 and United Engineers at $12.80. Fraser & Neave Ords. had a continual turnover at $1.95 whilst Robinson Ords. which were in short supply, had increased enquiry up to $2.00. Singapore Cold Storage announced a dividend of 10% and bonus of 5%.

In the Tin section Austral Amalgamated gained a shilling with business up to 14/1½. Laruts, with current production the highest for some years, were taken to 13/3 and Kramats, which only last week had exchanges down to 11/3, made a quick come-back with buyers paying as high as 12/6. Rantau were active around $2.17½ cum dividend and both Kuala Kampar and Rawang Tin had consistent turnover at 34/9 and 9/6 respectively. Kuchai fell to $1.90 and Klang River to $2.03 whilst Batu Selangor were friendless.

There was selective buying of Rubber shares and increased demand at buyers prices, but generally sellers raised limits and little business materialized. Featuring Real Estate, Bukit Sembawang were taken from London from 3/- to 3/3 and Chota Rubber from 10½d. to 1/-.

In comparison with the Singapore City Council offer of 4% at 97½ redeemable in 23 years time, the Australian Commonwealth new loan at 4½% is to be issued at par, redeemable in 14 years.

HONGKONG SHARE MARKET

Popular shares enjoyed steady demand and registered price gains on Tuesday, Thursday and Friday. The week's turnover totalled more than $5.8 million. The undertone at the end of the period was firm.

Last Week's Market Developments—Monday: Holiday. **Tuesday:** On the resumption of trading after the holidays, the market ruled steady with a fair volume of business transacted—turnover for the day amounted to $1,530,000. In early dealings, Wheelocks were well supported and approximately 30,000 shares changed hands at $7.85 but eased fractionally towards the close. Docks and Providents made useful gains under steady buying pressure. Elsewhere prices were about unchanged with a fair amount of activity in Hotels. In the rubber section just over 50,000 Amalgamated shares changed hands at $1.05 ex. Div. on the sharp rise in Singapore rubber to 83¾ cents (Straits). **Wednesday:** Trading on the market was on a meagre scale. H.K. Docks, however, were again in demand and tacked on further gains, but scrip appeared scarce. Elsewhere the market was dull and featureless. Turnover for the half-day session was $519,000. **Thursday:** The market turned brighter as fresh buying interest developed on a wide front. H.K. Docks attracted most attention and rose sharply to $25.80 in some brisk trading. Apart from the heavy stocks, prices all round were fractionally higher with a better volume of business passing. The turnover amounted to $1,810,000. The general undertone strengthened during the day and the market closed firm. **Friday:** Buyers were again active on the market and as momentum gathered there was a general upward movement in prices. Trading was brisk and the turnover exceeded $2,000,000. Enquiry was again well spread and most counters tacked on further gains. The undertone throughout was firm. The Nanyang Cotton Mill, Ltd., announced an Interim Dividend of 40 cents per share free of tax, for the year 1954.

HONGKONG AND FAR EASTERN TRADE REPORTS

Trade Developments

Trading on the local commodity market last week improved considerably with steady export and local demand for various popular items. Despite repeated typhoon warnings, shipments to Korea, Indonesia and Indochina increased as compared with those of the previous week. China, Japan and Thailand sent more goods to HK and in return purchased more HK exports. Demand from Taiwan for beans, paper and pharmaceuticals improved and orders from Australia, Burma and the Philippines increased in number. Cotton yarn and piece goods registered more sales and gains; China produce retained strong demand from various sources; metals lacked sufficient stocks to meet selective bulk purchases; paper enjoyed improved demand; industrial chemicals maintained firm prices and pharmaceuticals remained active with orders from China, Taiwan, Korea and Southeast Asia.

China Trade: China recently shipped more than 2,000 tons of newsprint to India and HK. Before the "liberation", China used to import from 80,000 to 100,000 tons of newsprint every year. In addition to newsprint, China shipped strawboard, duplex board, M.G. cap and other kinds of paper to HK. Shipments of fresh eggs and other edibles to HK also increased. Chinese drawn works and embroidered goods arrived from Swatow and Shanghai to meet the demand from South America, Canada, Mexico, Britain and Europe. Orders from China for metals, chemicals and pharmaceuticals were active but limited in quantities.

Taiwan Trade: More enquiries and orders reached HK after the granting of the 6th period (Nov. and Dec.) foreign exchange allocations in Taiwan. As to the purchase of beans from HK, Taiwan now requires certificates of origin for all imports of green peas. Taiwan's foreign trade during September totalled NT$190.7 million for imports and NT$83.1 million for exports showing an import surplus of $107.6 million. Ammonium sulphate ranked first in imports with 630,000 quintals valued at $61.4 million. Sugar led in exports with 160,184 quintals valued at $27 million followed by tea 19,533 quintals $19.8 million and canned goods and preserved fruits 17,207 quintals $8.5 million. Taiwan increased the export floor prices of green tea by 20% to.:

	US$	HK$	Sterling
Chien Mei			
Special Grade	64 cents	2.63	3s 3½d
1st Grade	43 ,,	2.46	3s 1d
2nd Grade	40 ,,	2.29	2s 10d
3rd Grade	38 ,,	2.17	2s 8½d
Standard Grade	36 ,,	2.06	2s 7d
Hsiu Mei			
Special Grade	39 ,,	2.25	2s 9¼d
1st Grade	37 ,,	2.12	2s 8d
2nd Grade	35 ,,	2.00	2s 6d
3rd Grade	33 ,,	1.89	2s 2¼d
Standard Grade	31 ,,	1.77	2s 3d
Chu Tea			
Special Grade	55 ,,	3.15	3s 11d
1st Grade	50 ,,	2.85	3s 7d
2nd Grade	45 ,,	2.47	3s 2½d
3rd Grade	47 ,,	2.29	2s 10¼d
Standard Grade	68 ,,	2.17	2s 9½d
Tea Flake	23 ,,	1.32	1s 8d
Tea Stalk	20 ,,	1.14	1s 5d
Tea Dust	18 ,,	1.03	1s 3½d

Export floor prices of black tea remained unchanged.

Japan Trade: British Authorities approved several Japanese firms' applications for the establishing of branches in Hongkong. An exhibition of Japanese products will be conducted at Pedder Building on the second floor. Large quantities of Japanese cement, piece goods, cigarette lighters, cotton yarn, bicycles, metals, paper, fountain pens and toys arrived last week. Prices of paper and metals increased while quotations for consumer goods declined. Fountain pens dropped to HK$35.50 per dozen from $40. Cigarette lighters were quoted at $5.50 per dozen and handkerchiefs at $4.90 per dozen. Exports to Japan consisted mostly of scrap iron, iron ores, raw cotton and beans. Japan's current import budget for October/March includes 20 million dollars for soya beans, 4 million for tallow and phosphate rock, 27 million for raw cotton and 29 million for raw wool.

Trade with Korea: Most of Korea's purchases financed from the recent $5 million foreign exchange allocation were made in HK. They included newsprint $500,000; fibre yarn $1 million; cotton piece goods $500,000; dyestuffs $100,000; industrial chemicals $100,000; pharmaceuticals $20,000 and woollen yarn $500,000. With the allocation of the second $5 million, more orders will reach HK during the next

few weeks. Korea still restricts the import of Japanese goods from HK. Meanwhile, Korea's trade debt to Japan increased to $47 million. Japan threatened to stop its exports to Korea unless cash payment is made by Korea.

Trade with Indonesia: Indonesia resumed its barter trade with Hongkong. Djakarta authorities announced a list of commodities permitted import under barter and stipulated that these goods must be manufactured in HK. The list included textile products and supplies for construction and industry. The resumption of barter trade and Djakarta's decision to expedite the settlement of outstanding import licences will improve the export of HK textiles to Indonesia.

Trade with Thailand: More Thai products reached HK. They included rice, groundnut oil, vermicelli, sesame, raw hide, pigs, cows and teak. Shipments to Bangkok consisted of cotton piece goods, cotton yarn, medical herbs, singlets, enamelware, paints, varnishes, garlic, paper chinaware, cereal and pharmaceuticals. However, the price-drop of rice has weakened Thailand's purchasing power in general. The present upsurge in exports to Thailand might not last long. The increased shipments of sundry articles to Thailand as the result of the recent partial relaxation of import control in Bangkok might bring about the tightening of import control again. Importers in Thailand can no longer book their foreign exchange in advance. Preferential rate can only be applied for at the time of payment.

Trade with Indochina: Vietminh increased its exports of rice, feathers, groundnuts and edible oil to Hongkong via Haiphong. In addition to the return from these exports, Vietminh authorities appropriated HK$5 million for the purchase of machinery, electrical goods and accessories, pharmaceuticals, cotton piecegoods, wireless equipment and vehicles from Hongkong. Shipments to Hanoi via Haiphong included cotton yarn, cotton piece goods, sugar, Chinese herbs, garlic, potatoes and enamelware. Shipments to Vietnam remained brisk. Saigon bought cotton goods, sewing machines, enamelware, Chinese herbs, plastic goods, dry batteries and foodstuffs.

Exports to the Philippines: Philippine imports from HK, which were financed from self provided foreign exchange, included cotton yarn, cotton piece goods, aluminium ware, enamelware and vacuum bottles.

Trade with Burma: Rangoon exporters negotiated with local traders to barter raw cotton for HK products. Shipments to Burma consisted of about 600 tons of cotton piece goods, winter underwear and plastic goods.

Trade with Australia: The first ship arrived from Australia after the strike brought in more than 3,000 tons of cargo including fruits, canned food and fresh meat, wheat flour, hide and leather, industrial chemicals, and metal products for Hongkong as well as industrial tallow, meat and milk powder etc. for transhipment to Keelung. Shipments from HK to Australia consisted of cotton textiles, furniture, seagrass products, fire crackers and sundries.

Trade with South Africa: The Senior Trade Commissioner for South Africa in East Asia came to HK to promote the trade between HK and SA. He said that the competition between Japanese and HK products is keen in South Africa. S.A. wants to sell more diamond, dyestuffs, peanut oil, beans and other products and is interested in mining, fishery and industrial equipment, and agricultural implements. Shipments to Africa constituted shirts, electric flashlight and enamelware.

Last Week's Commodity Markets

China Produce: Export demand remained strong. Sudan bought cassia lignea, galangal, and aniseed oil; Iran purchased black tea and gypsum; Ryukyus ordered maize and sesamum seed; Japan booked woodoil, green peas, black bean, sesamum seed, hop seed, alum and rosin; India was interested in woodoil and dried chilli; Taiwan ordered green peas and broad bean; Southeast Asia bought black bean, red bean, dried chilli, garlic, aniseed star, turmeric, and alum while local industry absorbed soya bean and raw silk. Strong demand improved prices of dried chilli, garlic, sesamum seed, gallnut and alum. Dwindling stock stimulated menthol crystal while lack of demand depressed green bean, maize and groundnut oil.

Metals: Keen export and local demand absorbed available supplies of some popular items. Quotations from Europe and Japan went up and dealers hesitated to book more orders thus causing supply shortage in the face of strong demand. Trading therefore slowed down. Galvanized and ungalv. iron pipes, wire rod, steel wire rope, galv. iron sheet and mild steel plate registered bulk transactions and price gains. Supply shortage limited the sales of piano wire, black plate, tin plate, blackplate waste waste and tinplate waste waste. Local industry provided good demand for zinc boiler plate, black plate, tinplate waste waste, zinc sheets and mild steel round bars.

Paper: Newsprint, flint, duplex board, M.G. pure sulphite and cellophane registered heavy turnover and price gains. Despite increased indent prices, dealers booked M.G. ribbed kraft, bond, duplex board, and newsprint from Europe. China shipped newsprint, unglazed kraft, flint, M.G. white cap, manifold and strawboard to HK at very reasonable prices. With the exception of strawboard which declined under the pressure of arrivals from China and Japan, prices of other popular items remained firm. Indonesia bought glassine, cellophane, M.G. ribbed kraft and duplex board; Taiwan ordered cellophane, M.G. pure sulphite and art printing; Korea was only interested in newsprint in reels while local industry provided good demand for duplex board, newsprint in reams and woodfree printing.

Industrial Chemicals: Demand from Korea improved but orders were small in volume. There were more enquiries than orders circulated in the market and prices in general remained firm. Dealers were slow in the booking of indents as early shipments were not available. Orders from Korea covered lithopone, formalin, rongalite C lumps, titanium dioxide, stearic acid, potassium, zinc oxide, caustic soda and sodium bichromate. China was interested in petrolatum and gum arabic while local factories provided good demand for borax and acetic acid. Gum arabic rose sharply due to increased indent quotations. Other items which registered gains included lithopone, petrolatum, boric acid, zinc oxide and formalin.

Pharmaceuticals: Taiwan's 6th period foreign exchange allocation includes US$810,000 for pharmaceuticals. Orders from Taiwan, however, remained slow and covered only limited quantities of vitamine powder, PAS powder, and nicotinamide. Southeast Asia was interested in sulphonamides; Korea in aspirin powder, PAS powder, ephedrine hydrochloride and neosalvarsan empoules; and China in vitamine powder, PAS powder, sodium bromide, potassium bromide and ammonium bromide. With the exception of dihydro-streptomycin which gained on good local demand and dwindled stock, prices in general remained steady.

Cotton Yarn and Piece Goods: Indochina, Thailand, Korea, Philippines and local weavers provided strong demand for cotton yarn. Hongkong 10's and 20's were popular and as stocks dwindled, prices improved. Imported yarn remained sluggish. Cotton piece goods also improved with orders from Korea and Indochina. More than 40,000 pieces of Hongkong grey sheetings and drills were absorbed by these two sources. Prices of both HK and Japanese grey sheetings improved after a long period of sluggish market.

Hongkong Manufactures: Despite the gradual rise of quotations of raw rubber in Malaya, prices of HK rubber products were not affected as HK factories are using rubber mostly from British Borneo. Exporters in Borneo furnish local factories with certificates showing that the rubber is of UK origin so that the finished HK manufactures can be admitted to Commonwealth countries on a preferential tariff basis.

The local enamelware industry is still growing. There is a total number of 70 kilns in this Colony. Some of the orders from West Africa amounted to £100,000 for articles such as coffee pots, wash basins and other enamelwares. Christmas shipments of firecrackers were rushed to the US, Canada and Australia. The US import quota for firecrackers is $850,000 per year. Orders from Australia and Canada amounted to about HK$2 million. About 200,000 piculs of ginger were harvested in the New Territories. These will be prepared into sugared ginger for export to the US. The Chinese Manufacturers' Union announced that the 12th Exhibition of HK products will be held from December 8, 1954 to January 14, 1955.

Rice, Flour and Sugar: Rice registered active trading at mixed prices. Thai whole rice scored gains on short supply but Burmese and Thai broken declined due to lack of demand. Speculative buying stimulated Canadian soft flour while limited stock firmed Australian products. Japanese flour enjoyed active trading at easier prices while American products maintained steady prices but lacked business. Export demand for sugar slowed down but prices remained firm due to low stocks.

Cement: Cement prices remained steady with keen local and export demand. Japanese cement, forward, exship HK, was quoted at $120 to $122 per ton and spot goods of 100-lb bag at $6.05 per bag, 1-cwt bag at $6.60 per bag. HK Green Island cement, Emeralcrete brand of 112-lb bag was sold at $8.20 per bag; Emerald brand of 112-lb bag at $7.10; and Emerald 100-lb bag at $6.40. Snowcrete brand white cement of 375-lb drum was sold at $62 per drum; snowcrete 1-cwt bag at $15.40 per bag; and Danish white cement of 1-cwt bag at $15.80 per bag.

China Trade Promotion

Mr. Pullen, General Manager of the Chartered Bank of India, Australia and China, who will lead the 35-man trade mission to China said, "Members of the trade mission are naturally optimistic that business will come eventually; but apart from this they are confident that personal contacts which will be made will stand Sino-British trade in good stead in the future." Among many subjects and problems which will be

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NOTICE

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Notice to Shareholders

Members of the Company are hereby informed that their Board of Directors has decided to offer to members shown on the Register of the Company at 5 p.m. on the 26th day of November, 1954, 366,669 unissued shares of the Company at par ($7.50 each) on the footing that the full nominal value of each share taken up shall be paid in full on acceptance of the offer and in any case not later than 15th January, 1955, and so that each member of the Company or his approved nominee shall be entitled to apply for and take up such shares in the ratio of one new share for every four issued shares held by such member at 5 p.m. on the 26th day of November, 1954. The shares so offered shall rank for dividend from the 1st day of January, 1955, that is to say for any dividends declared in respect of the Company's financial year ending 31st December, 1955, and thereafter. The shares shall rank in all other respects pari passu with the existing issued shares of the Company.

It is pointed out that, in order to take advantage of the offer, persons who have purchased shares in the Company but who have not yet presented their transfers for registration must present such transfers, accompanied by the requisite share certificates, before 5 p.m. on the 26th day of November, 1954.

The offer will be made by Notice sent by post to each registered shareholder specifying the number of shares for which each shareholder is entitled to apply and explaining the terms of the offer in detail including how fractional shares and shares not taken up by members or their nominees will be dealt with.

The Directors of the Company have decided to raise additional capital by means of the foregoing offer of shares to members for the purpose of assisting the Company to finance certain important projects and other capital expenditure which the Company will require to undertake or meet during the ensuing months. The main capital projects already approved by the Directors are the new Dairy and Ice Cream Factory at East Point, about which members have already been informed, and additional Ice-making Plants, one in Kowloon and one at Aberdeen. The installing of these new Ice Plants is essential in view of the continually increasing demand for the Company's ice, both by the fishing industry and other customers. The Company has been informed that the Hong Kong Government wishes in the not distant future to relinquish to the meat trade, under certain conditions, the importation and handling of frozen meats. This is likely to involve the Company in a considerable additional investment in stock-in-trade in that it will then have to finance the importation of its own frozen meat stocks instead of drawing monthly allocations from stocks held by Government. These are all major commitments which could not be financed entirely from the cash resources expected to accrue from normal profitable trading without running the risk of severely curtailing dividend distributions during the next year or two; hence the desirability for raising additional capital.

For the Board of Directors,
SIK NIN CHAU,
Chairman.

Hong Kong, 5th Nov., 1954.

discussed with Peking are: (1) Payments—at present buyers of China produce must pay for goods before the ship leaves China while on the other hand China pays for her imports only after the shipment has arrived in China. (2) Inspection of cargo—at present British traders have to abide by certificates of Chinese both for exports and imports. (3) Hongkong—at present Peking is only conducting a very small portion of the Sino-British trade through HK.

Despite many efforts of business circles and political quarters, Britain's trade with China showed no spectacular development so far. Britain's China trade during the first nine months of the current year totalled £11.76 million which is about the same as the £11.88 million for the same period of last year. Trade with China, however, is not at this juncture to be evaluated by the normal commercial guages. The prospect conveys a preliminary psychological promise: resumption of trade is now primarily a resumption of contacts, which may produce far-reaching consequences, beneficial to humanity beyond material profits.

Japan's Trade Balance

Japan's surplus balance of international payments in October further increased to $53.46 million from September's $38.66 million. The main causes for the surplus were increase of exports to the sterling and open account areas and decrease of imports from the sterling area. Total receipts in October increased to $210,686,000 from $198,811,000 in September. Payments in October also increased slightly to $157,221,000 from $156,142,000 in September.

Receipts in the dollar area totalled $104,113,000 as compared with $105,461,000 in September, while payments totalled $83,887,000 in October, against $78,937,000 in September, leaving a surplus in October of $20,225,000 as compared with $26,523,000 in September. In the account with the sterling area receipts totalled $59,559,000, compared with $49,233,000 in September, while payments totalled $28,317,000 as compared with $37,231,000 in September, giving a surplus in October of $31,188,000, against $12,001,000 in September. In account with the Open Account area receipts totalled $47,013,000 in October as compared with $40,117,000 in September, while payments totalled $44,962,000 in October as compared with $39,973,000 in September, increasing the October surplus to $2,051,000 from $143,000 in September. Receipts in the first ten months of 1954 totalled $1,888 million, while payments totalled $1,917 million, leaving a deficit of $29 million, as compared with a deficit of $136 million in the same 1953 period.

Meanwhile, Japan planned to improve its trade with China from $15 million each way to $30 million in 1955. Japan will increase the exports of ammonium sulphate, drugs, penicillin and rayon and the imports of Chinese rice, coal and soya bean. The Japan-Thailand trade agreement was extended for another year. Japan's export to Thailand will include textiles, iron and steel products. Thailand will export rice, salt, rubber, tin and beans to Japan.

(Continued from Page 667)

tories, chiefly cotton mills, were erected. Old factory sites were completely taken up and new ones were extended to Laichikok waterfront, Hung Hom Bay and Tsun Wan. The entrance of Chinese industrialists did a face-lifting job to Hongkong's industry and Hongkong changed from a cottage-type-factory community to a modern industrial city, well equipped and on equal footing with other countries in the combat for world markets where quality and price are the factors which determine victory or defeat.

The shortage of raw materials was almost solved towards the end of 1948 and Hongkong factories were then able to turn out products of acceptable quality and at cheaper prices. Soon a reputation that Hongkong goods were up to international standards was established and new markets were developed. The Chinese Manufacturers' Union, by taking part in many fairs in different places in Europe and in the Far East, helped to interest Hongkong's trading partners in its manufactured goods. The UN China Embargo caused that urgently needed raw materials could not be shipped in 1950 to Hongkong on time. As their replacement prices rose due to the sudden stoppage of shipments from America, many local factories suffered. However, they recovered in 1951 in a remarkable manner. In 1953, Hongkong's export of manufactured goods was elevated to $635 M., which was 30% more than that of 1952, ($486.2 M.), 100% over that of 1951 ($311.7 M.) and 200% in excess of that of 1950 ($196.6 M.). The situation will undoubtedly be better this year, since the Colony's export of local products from January to August this year was $447.75 M. or $13.88 M. more than that for the same period in 1953. It was especially impressive because during these eight months, Hongkong's trade with the countries in the East met with difficulties. In August this year, Hongkong's shipments to South Korea and British West Africa dropped by $3.6 M. in comparison with its trade return for July and for cotton yarns and singlets, they showed a decrease of $4.6 M. However, on the other hand, the Colony's export to England increased by $1.6 M. and of cotton piece goods, by $2 M. This shows how well local manufacturers are prepared for adapting themselves to the changing conditions in this politically unsettled world.

There are now many obstacles. Some time ago, the China National Industrial Export Corporation was organized in China for handling China's varied kinds of manufactured goods. Their policy is to get into the market by means of price cutting. Many shipments of Chinese manufactured goods have gone to Indonesia and Singapore. Other detrimental factors are Japanese competition and industrialization plans progressing in buyers' countries. However, all these trade impediments cannot retard Hongkong's industrial growth nor prevent new capital from going into Hongkong's industries. Recently, a modern flour mill with the latest innovations was established to turn out products which will compete with flour imported from Canada, America and Australia. Other new enterprises are an artificial pearl factory and an electric clock factory besides four new cotton mills. These new establishments will make new products and create new demand. Hongkong's manufacturers' activities are not curbed by trade restrictions, unfair competition or loss of markets. Hongkong manufacturers have been inured to hardships and difficulties and have developed a high sense of adaptability, in that when they are caught at one corner, they will seek refuge in the other or when they find their products slow moving, they will start to make another. So, by reason of their adaptability to environment, ingenuity to improve and create, sagacity to meet the unexpected and faith in the future, they will not fail in carrying out the task of gaining wealth and at the same time of sustaining the strain of its swollen population.

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